# 2016 Report on Accreditation in Respiratory Care Education

Commission on Accreditation for Respiratory Care



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#### INTRODUCTION

It is my great pleasure to provide to you, on behalf of the Board and Executive Office Staff of the Commission on Accreditation for Respiratory Care (CoARC), the 2016 Report on Accreditation in Respiratory Care Education. This is the fifth edition of this report which presents information on CoARC accredited programs and accreditation actions taken by the CoARC on an annual basis. The CoARC has developed this report to provide critical data in the following four areas:

- Descriptive statistics of CoARC Accredited Programs as of December 31, 2016;
- Accreditation actions taken in 2016;
- Aggregate statistics of graduate, enrollment, and outcomes data derived from the 2016 Annual Reports of Current Status submitted on July 1, 2016; and
- Programmatic data related to the AARC 2015 and Beyond Project.

There were 72 accreditation site visits in 2016 involving 55 volunteers. The commitment level of these volunteers is remarkable and truly appreciated. The CoARC expresses its gratitude to each of them for sharing the time and talent essential to the critically important goal of ensuring the quality of all respiratory care programs.

The CoARC collected annual report data using the annual reporting tool developed and maintained by Liaison International. The Annual Report of Current Status (RCS) was completed by a total of 445 programs and program options and submitted in July 2016. We would like to acknowledge the considerable time and effort required to provide the important information encompassed by the RCS. The charts included in this report are derived from these data as well as other data sets used by the CoARC, and are designed to provide aggregate information on accredited respiratory care educational programs and their graduates. This information can be used by the CoARC's communities of interest in their evaluations of the current state of the profession, both locally and nationally.

Please feel free to share suggestions for improvements or changes by contacting our Executive Director, Tom Smalling, PhD, RRT, FAARC, at <u>tom@coarc.com</u>.

Thank you for your support,

Bradley a. Leidil

Bradley A. Leidich, MSEd, RRT, FAARC President



## **EXECUTIVE SUMMARY**

#### PROGRAMS BY PROGRAM TYPE

As of December 31, 2016, there were a total of 440 programs under accreditation review by the CoARC. These include 433 accredited respiratory care programs, (428 accredited programs, 4 Approval of Intent applications, and one Letter of Intent application). There were 7 accredited sleep specialist programs.

#### PROGRAMS BY DEGREE OFFERED

As of December 31, 2016, 84% of the 428 total respiratory care accredited programs were associate degree and 15% were baccalaureate degree. Six programs (1% of total) offered a master's degree. Compared to 2015, there was a 1.4% decrease in associate degree programs and a 6.6% increase in baccalaureate degree programs. The AAS degree accounted for the largest (46.3%) of all degree types, an increase of 61% since 2011. There was an 11.0% decrease in AS programs since 2015. The BS degree accounted for 15.0% of all degree types, an increase of 30.6% since 2011.

#### PROGRAMS BY INSTITUTIONAL TYPE

As of December 31, 2016, 56% of programs and satellites were offered at a community/junior college, and 25% of programs were offered at a four-year college/university; 14% of accredited programs were offered at a technical/vocational School; 3% at an academic HSC/medical Center; 2% at a career/technical college, and <1% of programs were offered by the U.S. military. Interestingly, 45 of the associate degree programs (11%) are offered at four-year college/universities.

#### PROGRAMS BY INSTITUTIONAL CONTROL/FUNDING

As of December 31, 2016, 79% of sponsors were operating under a public/not-for-profit status. Fortyeight (11%) were operating under a private/for-profit (proprietary) status, forty-two (10%) were operating under a private/not-for-profit status and two (0.5%) were controlled and funded by the federal government. There was a 4% decrease in the number of public/NFP associate degree programs and a 13% decrease in the number of private/FP (proprietary) associate degree programs between 2014 and 2016.

#### PROGRAMS BY GEOGRAPHIC REGION

As of December 31, 2016, sixty-one (14%) were located in the Northeast, one hundred five (25%) in the Midwest, one hundred eighty-one (42%) in the South, and eighty (19%) in the West. A large number (44% percent of all baccalaureate programs and 42% of all associate degree programs) of programs are located in the South. The six master's degree programs are located in the Midwest and South.

#### PROGRAMS BY STATE AND D.C.

There are CoARC-accredited respiratory care programs in every state except Alaska. California remains the state with the largest number of programs and satellites with 38. States/locations with only one program include Wyoming, Vermont, New Hampshire, Hawaii, and the District of Columbia. As of December 31, 2016, the associate degree is offered in 48 states and the District of Columbia (North Dakota and Alaska are the exceptions). The associate degree is the only degree offered in DC and 23 states. The baccalaureate degree is offered in 27 states. The master's degree is offered in 6 states (Alabama, Illinois, Georgia, Kentucky, North Dakota, and Texas).



#### DEGREE EARNED BY KEY PERSONNEL

A majority (56%) of PDs have earned a master's degree, with 30% having a baccalaureate and 14% having a doctorate. For DCEs, a majority have the baccalaureate degree (48%), with the master's degree at 47%. Only 3% of DCEs have their doctoral degree.

#### **ACCREDITATION ACTIONS**

In 2015 there were 167 accreditation actions taken by the Board, 37 accreditation actions processed by the Executive Office and 72 site visits conducted.

#### Applications for Substantive Change

Of the 22 applications for substantive change processed by the CoARC in 2016, 13 were changes in the number of clock or credit hours and/or other changes in the length of the program.

#### **Changes in Program Information and Personnel**

Of the 49 permanent changes in program director in 2016, 20 were due to retirement, 14 due to resignation, 6 due to re-assignment, and 9 for other reasons.

#### 2016 ANNUAL REPORT OF CURRENT STATUS (RCS)

A total of 445 annual reports for respiratory programs (422 base programs, 16 satellite program options) and 7 sleep specialist program options) were used to generate the aggregate data (January 1, 2013 through December 31, 2015) from the 2016 RCS reports.

#### **Total Applications**

Total applications for admission to accredited respiratory programs were 14,085 for 2015. Applications reached a peak of 23,430 in 2011, and have decreased by 40% between 2011 and 2015. The mean number of applications per program was 35 in 2015. The median was 35.

#### **RC Applications by Degree Offered**

Compared to 2014, applications in 2015 to associate degree programs decreased by 30% and to baccalaureate programs by 5%. Applications to masters programs decreased 68%.

#### **RC Applications by Institutional Type**

Compared to 2014, applications in 2015 decreased by: 18% for community/junior colleges; by 28% for four-year colleges/universities; by 53% for technical/vocational schools; by 90% for U.S. military programs; and by 48% for academic HSC/medical centers. There was a 47% increase for career/technical colleges.

#### **RC Applications by Institutional Control/Funding**

Compared to 2014, applications in 2015 decreased by 15% in the public/not-for-profit sector; by 67% in the private/for-profit (proprietary) sector; by 41% in the private/not-for-profit sector; and by 90% for federal government (military) programs.

#### Applications by State (including D.C.) and Degree

California continues to have the largest (13% of total in 2015) number of applications.



#### **Total New Enrollments**

For 2015, there were 8,303 new students enrolled – 63.6% of capacity. The mean maximum annual enrollment capacity per program was 32 and the mean number of new enrollments per program was 20. The median was 18. There was a 6.2% decrease in new enrollments compared to 2014 and a 21% decrease compared to 2009.

#### New RC Enrollments by Degree Offered

Compared to 2014, new enrollments in 2015 decreased by 7.2% for associate degree programs and by 0% for baccalaureate programs. New enrollments increased by 29.4% for master's programs.

#### New RC Enrollments by Institutional Type

Compared to 2014, new enrollments in 2015 decreased by 4.4% for community/junior colleges; by 9.5% for academic HSC/medical centers; by 20.7% for technical/vocational schools; and by 2.2% for four-year colleges/universities. New enrollments increased by 130.8% for career/technical colleges and by 5.1% for U.S. military programs.

#### New RC Enrollments by Institutional Control/Funding

Compared to 2014, new enrollments in 2015 decreased by 3.7% in the public/not-for-profit sector, and by 26.1% in the private/for-profit (proprietary) sector. New enrollments increased by 33.5% in the private/not-for-profit sector and by 5.1% in the federal government sector.

#### New RC Enrollments by State (including D.C.) and Degree

California had the largest number of enrollments (14.2% of total) in 2015.

#### **Total Graduates**

There were 6,984 graduates in 2015. This is a 10.7% decrease compared to 2014. The mean number of graduates per program was 17. The median was 14.

#### **RC Graduates by Degree Offered**

Compared to 2014, number of graduates in 2015 decreased 11.4% for associate degree programs, by 5.5% for baccalaureate degree programs, and by 4.4% for master's degree programs.

#### **RC Graduates by Institutional Type**

Compared to 2014, number of graduates in 2015 decreased by 6.2% in community/junior colleges, by 17.5% in 4-year colleges/universities, by 21.2% in technical/vocational schools, and by 37% in academic HSC/medical centers. Graduate numbers increased by 90.2% in career/technical colleges; and by 61.3% in U.S. military programs.

#### **RC Graduates by Institutional Control/Funding**

Compared to 2014, the number of graduates in 2015 decreased by 7.8% in the public/not-for-profit sector, by 28.2% in the private/for-profit (proprietary) sector. Graduates increased by 15.4% in the private/not-for-profit sector, and by 61.3% in the federal government sector.



#### RC Graduates by State (including D.C.) and Degree

California had the largest number of graduates (16.3% of total) in 2015.

#### **Programmatic Attrition**

For the 2016 RCS, the mean attrition rate was 18.5%. A total of 11 programs (2.5% of total) reported attrition rates above the <u>CoARC-established threshold</u> of 40%. When compared to the 2015 RCS, the 2016 RCS data shows a slight (0.4%) decrease in the mean attrition rate. This was the second decrease in mean attrition rate since prior to the 2011 RCS. The median attrition rate for the 2015 RCS was 17.1%.

#### Attrition by Degree Offered, Institutional Type, and Institutional Control/Funding

For the 2016 RCS, associate degree programs had the highest mean attrition rate (19.9%) and master's degree programs had the lowest (5.6%). Programs located in technical or vocational schools showed the highest mean of 20.4%. Programs located in four-year colleges or universities had the lowest, 13.2%.

Programs controlled/funded by the private/for-profit (proprietary) sector had the highest mean attrition at 18.9%, while private/not-for-profit institutions had the lowest, at 16.1%.

#### **Positive (Job) Placement**

The 2016 RCS mean placement rate was 84.3% with the highest rate of 100% (n = 39) and the lowest rate of 28.6% (n=1). This is a 1.2% decrease when compared to 2015 RCS data and is the lowest mean placement rate since prior to the 2011 RCS. The median placement rate was 86.7%.

#### Placement by Degree Offered, Institutional Type, and Institutional Control/Funding

For the 2016 RCS, master's degree, baccalaureate degree, and associate degree programs showed decreases in mean placement rates when compared to the 2015 RCS. Baccalaureate degree programs had a higher mean (89.5%) than associate degree programs (83.4%). Four-Year Colleges or Universities had the highest overall mean (87.3%) while technical or vocational school programs had the lowest (78.8%).

Programs controlled/funded by the private/for-profit (proprietary) sector continued to demonstrate the lowest mean (75.1%).

#### **CRT Credentialing Success**

The mean CRT credentialing success was 92.5% with the highest at 100% (n=110) and the lowest at 46.7% (n=1). The median was 95.2%. A total of 35 programs (8.1% of total) reported success rates below the <u>CoARC established threshold</u> of 80%. When compared to the 2015 RCS data, the 2016 RCS data shows a 0.2% increase in the mean CRT credentialing success rate.

#### CRT Credentialing Success by Degree Offered, Institutional Type, and Institutional Control/Funding

CRT success for baccalaureate degree programs was higher (96.1%) than that of associate degree programs (91.8%). By institutional type, academic HSC/medical center programs continued to demonstrate the highest mean at 96.1%. U.S. military programs (controlled/funded by the federal government) continued to demonstrate the lowest mean at 82.4%. Based on funding/control, program CRT success in public/not-for-profit institutions was highest, at 93.3%.



#### 2016 First-Time Pass Rate Data for the NBRC TMC and CSE Exams

The mean first-time pass rate for the NBRC TMC Exam at the <u>low cut score</u> was 82.5% for associate degree programs, 88.5% for baccalaureate degree programs, and 98.2% for master's degree programs. The highest mean first-time pass rate at the <u>low cut score</u> was in academic HSC/medical centers (97.7%), and the private/for-profit (proprietary) sector was lowest (74.5%). The mean first-time pass rate for the TMC Exam at the <u>high cut score</u> was 72.9% for associate degree programs and 82.2% for baccalaureate degree programs. The highest mean first-time pass rate at the <u>high cut score</u> was 91.4% for academic HSC/medical centers and lowest (63.3%) for the private/for-profit (proprietary) sector.

The mean first-time pass rate for the CSE Exam was 56.8% for associate degree programs and 60.5% for baccalaureate degree programs. The highest mean first-time pass rate for the CSE Exam was 68.3% for academic HSC/medical centers and lowest (55.3%) for the career or technical colleges.

#### **RRT Credentialing Success**

The mean RRT credentialing success was 72.7% with the highest at 100% (n=28) and the lowest at 15.6% (n=1). The median was 77.1%. When compared to previous RCS data, the 2016 RCS data continues to show a considerable increase (2.2%) in the mean RRT credentialing success rate and an overall increase of 11.5% since the 2011 RCS.

#### RRT Credentialing Success by Degree Offered, Institutional Type, and Institutional Control/Funding

Baccalaureate programs had a higher mean (84.9%) than associate programs (70.5%). Only associate programs had an increased mean compared to the 2015 RCS. By institutional type, academic HSC/medical center programs continued to demonstrate the highest mean at 89.4%, while programs at U.S. military facilities continued to demonstrate the lowest, (30.1%). By funding criteria, the public/not-for-profit sector continued to demonstrate the highest mean (74.8%) while the federal government sector continued to demonstrate the lowest (30.1%).

#### **Overall Graduate Satisfaction**

The mean overall graduate satisfaction was 98.7% with the highest value of 100% (n=382) and the lowest value of 0% (n=3). The median overall graduate satisfaction was 100%. A total of 3 programs (0.7% of total) reported overall graduate satisfaction below the <u>CoARC-established threshold</u> of 80%.

#### Overall Graduate Satisfaction by Degree Offered, Institutional Type, and Institutional Control/Funding

Baccalaureate programs had a higher mean (99.4%) than associate programs (98.5%). By institutional type, four-year college or university programs had the highest mean at 99.5%, while programs at community or junior colleges had the lowest mean at 98.1%. By funding criteria, the private/not-for-profit sector had the highest mean (99.5%) while the public/ not-for-profit sector had the lowest (98.5%).

#### **Overall Employer Satisfaction**

The mean overall employer satisfaction was 97.8% with the highest value of 100% (n=341) and the lowest value of 0% (n=5). The median overall employer satisfaction was 100%. Five programs (1.2% of total) reported overall employer satisfaction below the <u>CoARC-established threshold</u> of 80%.



#### Overall Employer Satisfaction by Degree Offered, Institutional Type, and Institutional Control/Funding

Baccalaureate programs had a higher mean satisfaction (99.4%) than associate programs (98.5%). By institutional type, academic HSC/medical center programs had the highest mean at 99.5%, while programs at U.S. military facilities had the lowest at 96.6%. By funding criteria, the private/ for-profit (proprietary) sector had the highest mean (99.3%) while the federal government sector had the lowest (96.6%).

#### **On-Time Graduation Rate**

Mean on-time graduation rate was 91.0% with the highest value of 100% shared by 85 programs. One program had a 7.7% graduation rate. The median on-time graduation rate was 93.8%. A total of 13 programs (3% of total) reported on-time graduation rates below the <u>CoARC-established threshold</u> of 70%.

#### On-Time Graduation Rate by Degree Offered, Institutional Type, and Institutional Control/Funding

Baccalaureate programs had a higher mean (91.7%) than associate programs (90.8%). By institutional type, academic HSC/medical center programs had the highest mean at 92.8%, while programs at U.S. military facilities had the lowest mean at 55.1%. By funding criteria, the public/not-for-profit sector had the highest mean (92.8%) while the federal government sector had the lowest mean (55.1%).

#### PROGRAMMATIC DATA RELATED TO THE AARC 2015 AND BEYOND PROJECT

As of 12/31/2016, 69 sponsors offer an entry into practice baccalaureate or graduate degree programs (Category I). An additional 87 sponsors are currently qualified to offer both the entry into practice associate degree and the baccalaureate degree or to transition their associate degree to a baccalaureate degree (Category II). Under legislation passed by the various states in which they reside, 106 sponsors may choose to offer <u>both</u> the entry associate degree and entry baccalaureate degree, or they may transition their associate degree to a baccalaureate degree (Category III). Based on legislation or regulations specific to the state in which they are located the 166 sponsors that do not have the authority to award a baccalaureate degree may be capable of articulating with, or participating in a consortial partnership with, a 4-year degree-granting institution (Category IV).

#### **Baccalaureate Degree Eligibility – Enrollment Capacity and Graduation Rates**

As of December 31, 2016, 69 programs in Category I produced 837 graduates (51.0% of maximum enrollment capacity). The 87 programs in Category II produced 1,634 graduates (48.0% of maximum enrollment capacity). The number of baccalaureate degree graduates has the potential to increase by approximately 195% (or to 2,471 graduates per year) if sponsoring institutions in Category II were to convert their associate degree RC program to a baccalaureate degree. The 106 programs in Category III produced 1,707 graduates (56% of maximum enrollment capacity). The 166 programs in Category IV produced 2,715 graduates (51.7% of maximum enrollment capacity). Twenty-nine states have programs that fall under Category I, thirty states have programs that fall under Category II. Eleven states, including the District of Columbia, do not have a program in either Category I or II. Ten states, including the District of Columbia, have programs that only fall under Category IV. One state (Hawaii) only has a single Category III program.



#### MISSION AND SCOPE

The mission of the Commission on Accreditation for Respiratory Care (CoARC) is to ensure that high quality educational programs prepare competent respiratory therapists for practice, education, research and service. The CoARC accredits entry into respiratory care professional practice degree programs at the Associate, Baccalaureate, and Master's Degree level in the United States. The CoARC also accredits professional respiratory care degree programs offering certificates in polysomnography. In March 2016, the CoARC granted an Approval of Intent to its first Degree Advancement program.

#### 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 the continuous improvement of these educational programs by mandating continuing reassessment of resources, educational processes, and outcomes. The CoARC is responsible for evaluating respiratory care educational programs and publicly recognizing those which meet agreed-upon standards of quality, i.e., the *2015 Accreditation Standards for the Profession of Respiratory Care.* The CoARC only accredits degree-granting, post-secondary programs in the U.S. and its territories. Respiratory therapists are members of a team of health care professionals working in a wide variety of clinical settings to evaluate, treat, and manage patients of all ages with respiratory illnesses and other cardiopulmonary disorders.

#### **HISTORICAL BACKGROUND**

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 [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 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.

Since 1986, the CoARC has used an outcomes-centered approach to its accreditation review process. This approach focuses on a specific set of outcomes which currently include the following: a) Graduate performance on national credentialing examinations; b) Programmatic attrition; c) Graduate and employer satisfaction with program; d) Job placement; and e) On-time graduation rate. The CoARC routinely monitors the program's outcomes results in relation to the thresholds via an Annual Report of Current Status (RCS). Any program not meeting all the thresholds must document in the RCS a detailed analysis of each deficiency and provide a specific action plan to address that deficiency.



#### PROGRAMS BY PROGRAM TYPE

Programs are grouped into three categories and are assigned a unique 6-digit number based on the category to which they are assigned:

- (200-level): Programs that prepare graduates with demonstrated competence in the cognitive (knowledge), psychomotor (skills), and affective (behavior) learning domains of respiratory care practice as performed by Registered Respiratory Therapists (<u>RRT</u>s). 200-level program graduates can earn both the National Board for Respiratory Care (NBRC) Certified Respiratory Therapist (CRT) credential and RRT credential. Programs in this category are subcategorized as Entry into Professional Practice base programs (200-level), Entry into Professional Practice Additional Degree Track (ADT) baccalaureate (210-level), and Entry into Professional Practice Additional Degree Track (ADT) Master's (220-level)
- 2. (<u>300-level or Satellite programs</u>): These are programs, offered by a base program at a location separate from the base program but within the U.S. and its Territories, at which all core Respiratory Care didactic and laboratory courses are available. This does not pertain to sites used by a completely on-line/distance education program for individual students or to base programs with students attending one or more classes via distance learning technologies. Satellite location(s) function under the direction of the Key Personnel of the base program.
- 3. (400-level or Sleep Disorders Specialist programs): Programs that prepare sleep disorder specialists with demonstrated competence in the cognitive (knowledge), psychomotor (skills), and affective (behavior) learning domains of polysomnography practice as performed by sleep disorder specialists (SDS). 400-level program graduates have the opportunity to earn both the NBRC SDS credential and Board of Registered Polysomnographic Technologists (BRPT) Registered Polysomnographic Technologists (RPSGT) credential.
- 4. (500-level): Degree Advancement (DA) programs that prepare graduates to meet the needs of practicing respiratory therapists with an RRT who, having already completed an accredited respiratory care program with an Entry into Respiratory Care Professional Practice degree, wish to obtain advanced training in Respiratory Care. Advanced educational experiences, designed to enhance a respiratory therapist's ability to function in clinical, teaching, administrative, or research environments, are essential components of degree advancement programs in respiratory care.

As of December 31, 2016, there were a total of 440 programs and program options under accreditation review by the CoARC. Most of these programs are sponsored by public and private higher education institutions. Two programs are sponsored federally: one by the U.S. Army and one by the U.S. Air Force. In addition to this report, there are two internet links; one for RC programs and one for sleep specialist program options: For RC programs: <u>http://www.maptive.com/ver3/RC2016CoARCRCSData</u>. For sleep specialist program options: <u>http://www.maptive.com/ver3/SDS2016CoARCRCSData</u>.

Of the 440 programs, 8 received an Approval of Intent (approval of their Letter of Intent applications to start developing an accredited program) in 2016. A total of 23 programs held Provisional Accreditation which is the term used by the CoARC to signify that a program, through a multi-step process, has demonstrated sufficient compliance with the Standards to initiate a program and admit students. As mentioned previously, the CoARC also accredits sleep disorders specialist programs as add-on program options to accredited respiratory care programs. There were 7 such accredited program options. There were 11 domestic satellite campuses. **Table 1** (below) provides a breakdown of program numbers by program type.

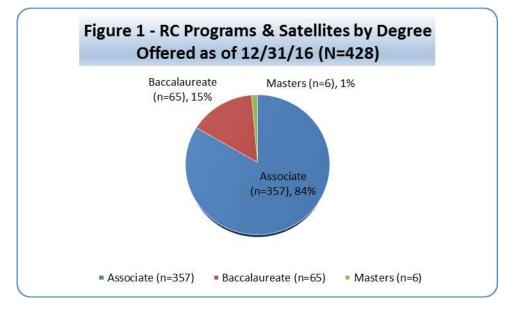


Table 1 – Program Numbers by CoARC Level as of December 31, 2016 (N=440)							
	200-level (Entry Base)	210-level (Entry ADT Baccalaureate)	220-level (Entry ADT Master's)	300-level (U.S. Satellite)	400-level (SDS Certificate)	500-level (Degree Advancement)	
Continuing Accreditation	374	4	3	11	6	0	
Probationary Accreditation	9	0	0	0	0	0	
Provisional Accreditation	19	2	1	0	1	0	
Inactive Accreditation	1	0	0	0	0	0	
Approval of Intent	4	0	0	0	0	4	
Letter of Intent	1	0	0	0	0	0	

### PROGRAMS BY DEGREE OFFERED

Programs accredited by the CoARC are in institutions which are accredited by a regional or national accrediting agency that is recognized by the U.S. Department of Education (USDE) and authorized under applicable law or other acceptable authority to award graduates of the program an associate or higher degree (*CoARC Entry into Practice Standard 1.01*). <u>Note</u>: In July 2015, the CoARC approved standards for Degree Advancement (DA) programs and we are in the process of completing the first site visit for a DA program. The subsequent data presented in this section do not include the 4 DA programs currently awarded an Approval of Intent.

Figure 1, below, provides a graphic representation of degrees offered.





As of December 31, 2016, there were a total of 428 Entry into Respiratory Care Professional Practice programs/program satellites that hold a CoARC accreditation status (including the 4 respiratory care programs with an Approval of Intent). Of these, 357 (84% of total) confer the associate degree upon graduation and 65 (15% of total) programs confer the baccalaureate degree. Six programs (1% of total) confer the master's degree. Compared to data from the 2015 Report on Accreditation, there was a 1.4% decrease in the number of associate degree programs offered and 6.6% increase in the number of baccalaureate degree programs offered. The number of master's degree programs increased from four to 6. Seven institutions offer a certificate upon completion of the sleep specialist program option (Stony Brook University, Texas State University-San Marcos, Youngstown State University, Gannon University, James A. Rhodes State College, Tyler Junior College, and Southern Crescent Technical College).

**Table 2** provides a breakdown of program numbers by degree type. The Associate of Applied Science (AAS) degree accounted for the largest (46.3%) of all degree types offered in 2016, an increase of 61% compared to 2011. In 2015, AAS degree programs began outnumbering AS degree programs. The Associate of Science (AS) degree accounted for 35.7% of all degree types offered in 2016. This is an 11.0% decrease compared to 2015 and a 40.2% decrease since 2011. The increase in AAS degrees between 2011 and 2016 may be related to the increase in state-mandated limits on the number of credit hours for associate degree programs.

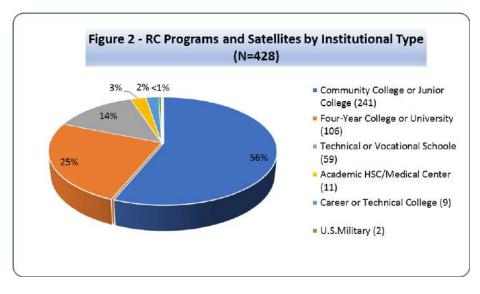
The Bachelor of Science (BS) degree accounted for 15.0% of all degree types offered in 2016, an increase of 30.6% compared to 2011. The one BAS program was a conversion of an AAS program. \*<u>Note</u>: Starting in the 2013 report, data from the programs that offered more than one degree type (i.e., Associate and Baccalaureate or Baccalaureate and Masters) were separated and each degree offered by these programs was assigned a different CoARC number. This report no longer includes combined degree data.

Table 2 – RC Programs and Satellites by Degree for 2011 through 2016									
	as of 12/31/11 (N=444)	as of 12/31/12 (N=437)	as of 12/31/13 (N=441)	as of 12/31/14 (N=438)	as of 12/31/15 (N=427)	as of 12/31/16 (N=428)			
Associate of Science (AS)	256	239	215	196	172	153			
Associate of Applied Science (AAS)	123	138	161	174	186	198			
Associate of Specialized Technology (AST)	3	3	3	2	2	3			
Associate of Occupational Studies (AOS)	2	2	2	2	2	3			
Bachelor of Science/Masters of Science (BS/MS)	2	3	N/A*	N/A*	N/A*	N/A*			
Bachelor of Science (BS)	49	49	57	60	60	64			
Bachelor of Applied Science (BAS)	0	0	0	1	1	1			
Associate of Science/ Bachelor of Science (AS/BS)	4	3	N/A*	N/A*	N/A*	N/A*			
Associate of Applied Science/ Bachelor of Science (AAS/BS)	5	0	N/A*	N/A*	N/A*	N/A*			
Master of Science (MS)	N/A*	N/A*	3	3	4	6			



#### PROGRAMS BY INSTITUTIONAL TYPE

The CoARC assigns programs to one of six categories that define the type of institution sponsoring the respiratory care program. These categories are: (1) Academic HSC/Medical Center; (2) Career or Technical College; (3) Community College or Junior College; (4) Four-Year College or University; (5) Technical or Vocational School, and (6) U.S. Military. As of December 31, 2016, there were 241 respiratory care programs and satellites offered at a community or junior college. Although that was the largest (56%) of the categories, this is no change compared to 2015 data. One-hundred six (25%) programs were offered at a four-year college or university, which is a 6.0% increase compared to 2015 data. Fifty-nine (14%) programs were offered at a technical or vocational school. Eleven (3%) programs were offered at an academic health sciences or medical center. Nine (2%) programs were offered at a career/technical college. Two programs (<1%) were offered at a U.S. military. Figure 2 illustrates these categories.



Four of the seven sleep disorders specialist add-on program options were offered at a four-year college or university. The remaining three sleep disorders specialist add-on program options were offered at a community or junior college.

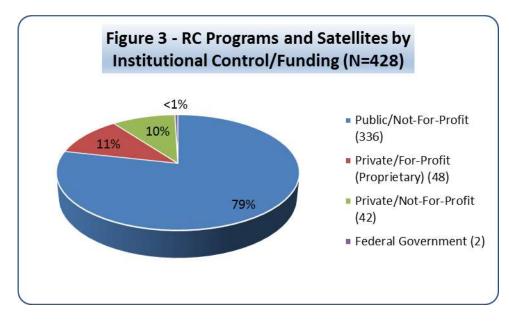
**Table 3** provides a comparison of programs by institutional type and degree. The majority (56%) of programs in 2016 conferring the associate degree are offered at community or junior colleges. Interestingly, 45 programs (11%) conferring the associate degree were offered at four-year colleges or universities in 2016. The one baccalaureate program offered by a community college is at Seattle Central College, WA.

Table 3 – RC Programs and Satellites by Institutional Type and Degree (2014 thru 2016)										
	Associate			Ba	Baccalaureate			Masters		
	as of 12/31/16 (N=428)	as of 12/31/15 (N=427)	as of 12/31/14 (N=438)	as of 12/31/16 (N=428)	as of 12/31/15 (N=427)	as of 12/31/14 (N=438)	as of 12/31/16 (N=428)	as of 12/31/15 (N=427)	as of 12/31/14 (N=438)	
Community of Junior College	240	240	246	1	1	1	0	0	0	
<b>Technical or Vocational School</b>	59	68	70	0	0	0	0	0	0	
Four-Year College or University	45	46	49	56	51	50	5	3	2	
Career or Technical College	9	5	6	0	0	0	0	0	0	
Academic HSC/Medical Center	2	1	1	8	9	10	1	1	1	
U.S. Military	2	2	2	0	0	0	0	0	0	



#### PROGRAMS BY INSTITUTIONAL CONTROL/FUNDING

The CoARC assigns programs to one of four categories based on the governance of its sponsor: by publicly elected/appointed officials, with its major source of funds from public sources (Public/Not-For-Profit); by privately elected or appointed officials, with its major source of funds from private sources (Private/Not-For-Profit or Private/For Profit); or by a branch of the Armed Forces, with its major source of funds from federal appropriations (Federal Government). As of December 31, 2016, 336 (79%) institutions sponsoring a respiratory care program were operating under a public/not-for-profit status. Forty-eight (11%) institutions were operating under a private/for-profit (proprietary) status. Forty-two (10%) institutions were operating under a private/not-for-profit status. Two (<1%) institutions were controlled and funded by the federal government. Compared to data from the 2015 Report on Accreditation, there were small decreases in the number of public/not-for-profit and private/for-profit (proprietary) sponsors of respiratory care programs. **Figure 3** illustrates these categories.



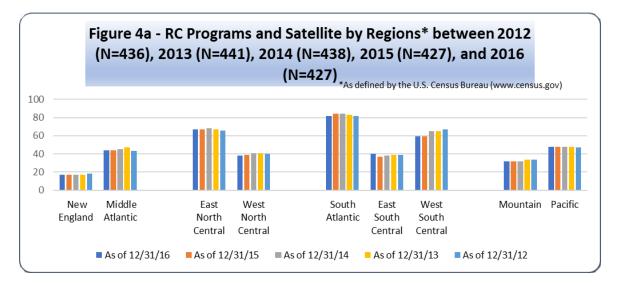
**Table 4** provides a comparison of programs by institutional control and degree offered. The majority (67%) of programs in 2016 conferring the associate degree are sponsored by public/not-for-profit institutions. There was a 4% decrease in the number of public/NFP associate degree programs and a 13% decrease in the number of private/for-profit (proprietary) associate degree programs between 2014 and 2016.

Table 4 – RC Programs and Satellites by Institutional Control and Degree (2014 thru 2016)									
	Associate Baccalaureate Masters						5		
	as of 12/31/16 (N=428)	as of 12/31/15 (N=427)	as of 12/31/14 (N=438)	as of 12/31/16 (N=428)	as of 12/31/15 (N=427)	as of 12/31/14 (N=438)	as of 12/31/16 (N=428)	as of 12/31/5 (N=427)	as of 12/31/14 (N=438)
Public-Not-For-Profit	287	290	299	47	47	48	2	2	1
Private/For-Profit (Proprietary)	48	53	55	0	0	0	0	0	0
Private-Not-For-Profit	20	17	18	18	14	13	4	2	2
Federal Government	2	2	2	0	0	0	0	0	0

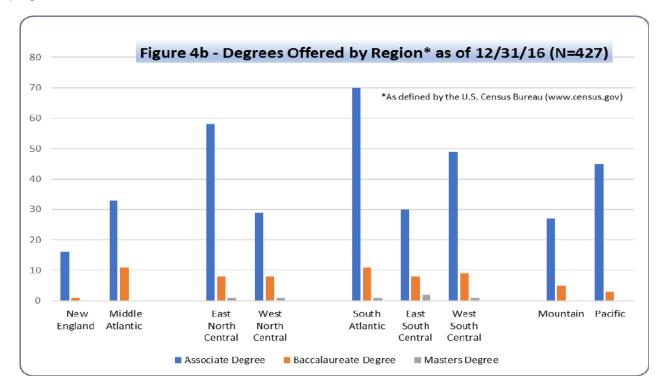


#### PROGRAMS BY GEOGRAPHIC REGION

**Figure 4a** illustrates the number of programs and satellites by region\* between 2012 and 2015. As of December 31, 2016, sixty-one (14%) are in the Northeast; one hundred five (25%) are in the Midwest; one hundred eighty-one (42%) are in the South; eighty (19%) are in the West. There were no significant differences in the past five years. Not included in 2016 is the one program in Puerto Rico.



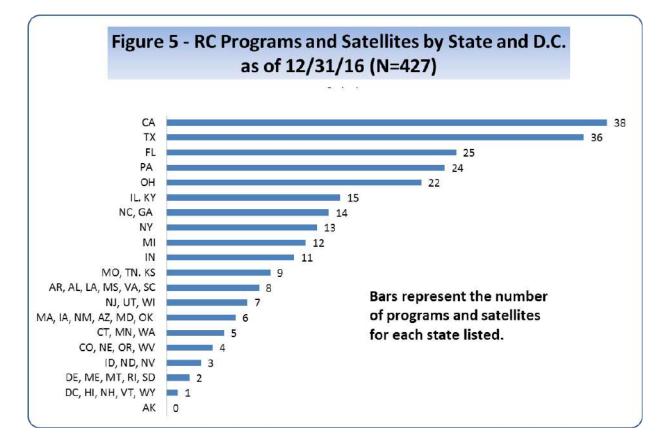
**Figure 4b** illustrates the degrees offered by region\*. As of December 31, 2016, 44% percent of all baccalaureate programs and 42% of all associate degree programs are in the South. The six master's degree programs are in the Midwest and South.





#### PROGRAMS BY STATE AND D.C.

**Figure 5** displays the number of respiratory care programs and satellites in each state and the District of Columbia. CoARC-accredited respiratory care programs are located in every state except Alaska. California remains the state with the largest number of programs and satellites with 38. States/locations with only one program include Wyoming, Vermont, New Hampshire, Hawaii, and the District of Columbia.



**Table 5** (next two pages) provides a comparison of programs by state (including District of Columbia) and degree. As of December 31, 2016, the associate degree is offered in 48 states and the District of Columbia (North Dakota and Alaska are the exceptions). In 23 states and DC, the associate degree is the only degree offered. The baccalaureate degree is offered in 27 states. The master's degree is offered in 6 states (Alabama, Illinois, Georgia, Kentucky, North Dakota, and Texas).

Not included in **Figure 5 and Table 5** are the 7 sleep disorders specialist program options which are located in New York, Texas, Pennsylvania, Ohio, and Georgia.



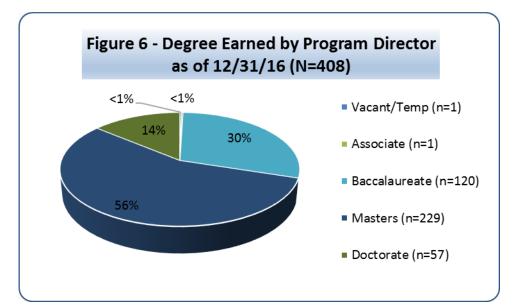
Table 5 – RC Programs and Satellites by State (including D.C) and Degree (N=427) as of 12/31/16							
	Associate	Baccalaureate	Masters				
Alabama (n=8)	4	3	2				
Alaska (n=0)	0	0	0				
Arkansas (n=8)	7	1	0				
Arizona (n=6)	6	0	0				
California (n=38)	37	1	0				
Colorado (n=4)	4	0	0				
Connecticut (n=5)	4	1	0				
District of Columbia (n=1)	1	0	0				
Delaware (n=2)	2	0	0				
Florida (n=25)	23	2	0				
Georgia (n=14)	10	3	1				
Hawaii (n=1)	1	0	0				
lowa (n=6)	6	0	0				
Idaho (n=3)	2	1	0				
Illinois (n=15)	13	1	1				
Indiana (n=11)	9	0	0				
Kansas (n=9)	8	1	0				
Kentucky (n=15)	12	2	1				
Louisiana (n=9)	6	3	0				
Massachusetts (n=6)	6	0	0				
Maryland (n=6)	5	1	0				
Maine (n=2)	2	0	0				
Michigan (n=12)	12	0	0				
Minnesota (n=5)	3	2	0				
Missouri (n=9)	7	2	0				
Mississippi (n=8)	8	0	0				
Montana (n=2)	2	0	0				
North Carolina (n=14)	14	0	0				
North Dakota (n=3)	0	2	1				
Nebraska (n=4)	3	1	0				
New Hampshire (n=1)	1	0	0				
New Jersey (n=7)	5	2	0				
New Mexico (n=6)	6	0	0				
Nevada (n=3)	3	0	0				
New York (n=13)	10	3	0				
Ohio (n=22)	17	5	0				
Oklahoma (n=6)	6	0	0				
Oregon (n=4)	3	1	0				
Pennsylvania (n=24)	18	6	0				
Rhode Island (n=2)	2	0	0				



	Associate	Baccalaureate	Masters
South Carolina (n=8)	8	0	0
South Dakota (n=2)	2	0	0
Tennessee (n=9)	6	3	0
Texas (n=36)	30	5	1
Utah (n=7)	3	4	0
Virginia (n=8)	5	3	0
Vermont (n=1)	1	0	0
Washington (n=5)	4	1	0
Wisconsin (n=7)	7	0	0
West Virginia (n=4)	2	2	0
Wyoming (n=1)	1	0	0

#### DEGREE EARNED BY KEY PERSONNEL

**Figure 6** shows the highest degree earned by program directors of accredited respiratory care programs as of December 31, 2016. Since 2000, the CoARC has required a minimum of a baccalaureate degree for both the Program Director (PD) and Director of Clinical Education (DCE). At that time, PDs and DCEs who did not have baccalaureate degree were grandfathered in. As of December 31, 2016, only one of these individuals continues as a PD. The other PD with an associate degree is a temporary replacement. This position does not require the baccalaureate. The most common highest degree earned by PDs continues to be the master's degree (56%), followed by the baccalaureate degree (30%). Doctoral degrees ranked third most common at 14%.





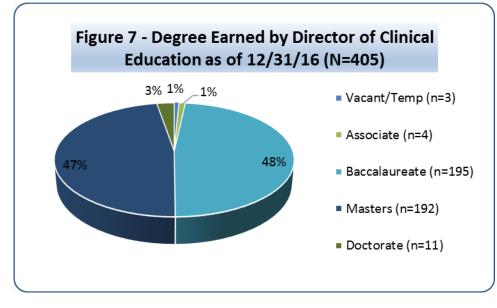
**Table** 6 (below) shows the highest degree earned by program directors of accredited respiratory care programs and satellites as of December 31, 2014, December 31, 2015, and December 31, 2016. The Baccalaureate of Science (BS), Master of Science (MS) and Doctor of Philosophy (PhD) continue to be the most commonly earned degrees for each degree category.

Table 6 – Highest Degree Earned by PD as of 12/	31/14, 12/31/1	5, and 12/31/10	6
	as of 12/31/14 (n=437)	as of 12/31/15 (n=403)	as of 12/31/16 (n=408)
Associate of Applied Science (AAS)	1	2	1
Associate of Science (AS)	0	0	1
Bachelor of Science (BS)	95	84	74
Bachelor of Arts (BA)	26	25	23
Bachelor of Science in Respiratory Care/Therapy (BSRT/BSRC)	10	8	9
Bachelor of Science in Education (BSEd)	5	3	3
Bachelor of Applied Science (BAS)	3	3	4
Bachelor of Applied Technology (BAT)	2	2	2
Bachelor of Science in Health Administration (BSHA)	2	0	0
Bachelor of General Studies (BGS)	1	0	1
Bachelor of Science Accounting (BSF)	0	0	1
Bachelor of Health Sciences (BHS)	1	1	1
Bachelor of Independent Studies (BIS)	1	0	0
Bachelor of Business Administration (BBA)	1	1	1
Bachelor of Science in Health Management (BSHM)	1	1	1
Bachelor of Science in Health Sciences (BSHS)	1	1	0
Master of Ocianae (MO)	60	50	64
Master of Science (MS)	63	56	64
Master of Education (MEd/EdM)	53	54	52
Master of Business Administration (MBA)	26	23	23
Master of Arts (MA)	25	22	25
Master of Arts in Education (MAE)	10	8	8
Master of Science in Education (MSEd)	8	10	9
Master of Public Administration (MPA)	<u> </u>	7	6
Master of Public Health (MPH)	6	6	6
Master of Science in Administration (MSA)	5	4	4
Master of Health Administration (MHA)	5	9	10
Master of Health Science (MHS)	5	4	6
Master of Management (MM)	3	2	2
Master of Science in Nursing (MSN)	2	3	2
Master of Science in Management (MSM)	0	0	1



Master of Professional Studies (MPS)	2	2	1
Master of Science in Health Science (MSHS)	0	0	1
Master of Science in Public Health (MSPH)	0	0	1
Master of Selected Studies (MSS)	2	1	1
Master of Arts in Teaching (MAT)	1	1	1
Master of Advanced Study (MAS)	1	1	1
Master of Science in Health Professions (MSHP)	1	1	1
Master of Training and Development (MTD)	1	1	1
Master of Rehabilitation Counseling (MRC)	1	1	1
Master of Human Resource Management (MHRM)	1	1	1
Master of Library Science (MLS)	1	1	1
Master of Higher Education (MHEd)	1	1	0
Doctor of Philosophy (PhD)	29	26	27
Doctor of Education (EdD)	12	11	11
Doctor of Health Science (DHSc)	4	4	5
Juris Doctor (JD)	3	3	4
Doctor of Public Health (DrPH)	3	1	0
Education Specialist (EdS)	2	3	4
Doctor of Management (DM)	1	1	1
Doctor of Oriental Medicine (DOM)	1	1	1
Doctor of Physical Therapy (DPT)	1	1	2

**Figure 7** shows the highest degree earned by Directors of Clinical Education of accredited respiratory care programs and satellites as of December 31, 2016. The most common highest degree earned remains a baccalaureate degree (48% of total), with the master's degree at 47% and the doctoral degrees at 3%. The 4 DCEs with associate degrees were grandfathered in – i.e. have held their positions since 2000.





**Table 7** shows a breakdown of the highest degree earned by DCE's of accredited respiratory care programs as of December 31, 2014, December 31, 2015, and December 31, 2016. The Baccalaureate of Science (BS), Master of Science (MS) and Doctor of Philosophy (PhD) remained the most commonly earned degrees for each degree category.

Table 7 – Highest Degree Earned by DCE as of 12/31/14, 12/31/15, and 12/31/16							
	as of 12/31/14 (n=429)	as of 12/31/15 (n=397)	as of 12/31/16 (n=405)				
Associate of Science (AS)	4	3	4				
Associate of Applied Science (AAS)	4	2	3				
Bachelor of Science (BS)	151	142	132				
Bachelor of Arts (BA)	36	32	29				
Bachelor of Science in Respiratory Care/Therapy (BSRT/BSRC)	11	11	15				
Bachelor of Health Sciences (BHS)	9	6	5				
Bachelor of Applied Science (BAS)	3	3	2				
Bachelor of Education (BEd)	0	0	1				
Bachelor of Business Administration (BBA)	3	1	2				
Bachelor of Applied Art and Sciences (BAAS)	1	0	1				
Bachelor of Science in Education (BSEd)	1	1	1				
Bachelor of Science in Management (BSM)	1	1	1				
Bachelor of General Studies (BGS)	1	1	2				
Bachelor of Science in Public Affairs (BSPA)	0	1	1				
Bachelor of Science in Health Care Administration (BSHCA)	0	0	2				
Bachelor of Independent Studies (BIS)	1	0	0				
Bachelor of Science in Health Science (BSHS)	0	1	0				
Bachelor of Liberal Studies (BLS)	1	1	1				
Bachelor of Science in Health Systems Management (BSHSM)	1	1	0				
Master of Science (MS)	64	56	57				
Master of Education (MEd/EdM)	42	44	45				
Master of Business Administration (MBA)	17	18	21				
Master of Arts (MA)	17	13	15				
Master of Public Health (MPH)	9	11	12				
Master of Health Administration (MHA)	7	5	7				
Master of Science in Education (MSEd)	7	9	8				
Master of Health Science (MHS)	4	7	6				
Master of Public Administration (MPA)	3	4	5				
Master of Science in Administration (MSA)	2	1	1				
Master of Arts in Education (MAE)	2	3	4				



Master of Science in Management (MSM)	2	2	3
Master of Science in Healthcare Management (MSHCM)	0	1	1
Master of Advanced Study (MAS)	1	0	0
Master of Sciences in Health Sciences (MSHS)	0	0	1
Master of Science in Clinical Research (MSCR)	0	0	1
Master of Liberal Arts & Science (MLAS)	0	0	1
Master of Science in Health Professions Education (MSHPE)	0	1	1
Master of Arts in History (MAH)	0	1	1
Master of Science in Health Services Administration (MSHSA)	1	1	1
Master of Divinity (MDIV)	1	1	1
Doctor of Philosophy (PhD)	9	6	7
Doctor of Health Science (DHSc/DHS)	7	3	3
Doctor of Education (EdD)	2	1	0
Education Specialist (EdS)	2	0	0
Juris Doctor (JD)	1	0	0
Doctor of Health Education (DHEd)	1	1	1



#### ACCREDITATION ACTIONS

The CoARC makes most accreditation decisions during its Board meetings (which occur three times per year typically in March, July, and November), based on an accreditation review cycle described in Section 1 of the 2016 CoARC Accreditation Policies and Procedures Manual (revised version available at <u>www.coarc.com/31.html</u>.) The statuses of Administrative Probation, Voluntary Withdrawal of Accreditation and Voluntary Inactive Accreditation do not require a vote by the CoARC Board and are processed by the Executive Office throughout the year. **Table 8** is a summary of accreditation actions taken by both the Commission and the CoARC Executive Office in 2016. The three columns (March, June, and November) relate to specific actions taken by the Commission at Board meetings.

Table 8 – CoARC Accreditation Actions for 2016					
		March 2016	June 2016	November 2016	Total
Α	pproval of Intent	7	4	1	12
Provi	sional Accreditation	0	4	1	5
Continuing	Base Program	18	17	27	62
Continuing Accreditation	Satellite Option	0	0	0	0
Accreation	Sleep Specialist Program Option	0	0	0	0
Drebetiener	Conferred	0	0	6	6
Probationary Accreditation	Removed	1	1	2	4
Accreutation	Reviewed	9	0	3	12
Progress Report	Accepted as Final	2	0	11	13
Reviewed	Additional PR Requested	35	0	18	53
Withdrawal	Accreditation – Involuntary	0	0	0	0
With	hold Accreditation	0	0	0	0
Substantive Chang	es Reviewed by the Commission	0	0	0	0
Total Nu	mber of Accreditation Actions taken	by the Comn	nission in 201	6	167
Letter of In	tent Applications Submitted (5 Entry i	into Practice; 3 D	egree Advancem	ent)	8
	Voluntary Inactive Accre	ditation			0
Voluntary Withdrawal Accreditation				6	
Administrative Probation Assigned				1	
Application for Substantive Change				22	
Total Number of	Accreditation Actions processed by	the CoARC E	Executive Office	ce in 2016	204

The CoARC is required to keep the public informed about its accreditation actions. One of the ways the CoARC does this is to provide the public with information about the accreditation decision process, the nature and scope of CoARC accreditation activity and the importance and value of accreditation (<u>http://www.coarc.com/46.html</u>). The CoARC also provides the public with detailed descriptions of its accreditation policies and procedures by publishing its Accreditation Policies and Procedures Manual (<u>http://www.coarc.com/31.html</u>). In addition, prior to each Board meeting, the CoARC provides a list of programs scheduled to be reviewed and, following each meeting, the accreditation actions taken (<u>http://www.coarc.com/11.html</u>).



The following section lists the specific accreditation actions taken by the CoARC during 2016.

#### Letter of Intent Applications Submitted

The first step in the accreditation process is the submission of a Letter of Intent (LOI) application that declares the sponsor's intention to start a new program. The application, including supplementary materials, is reviewed by the CoARC Executive Office to ensure completeness, and subsequently by the Program Referee (a member of the CoARC Board who serves as the liaison between the program and the Commission). Further details regarding the Letter of Intent application process can be found in CoARC Policy 2.0.

Program Name	Туре	Location	Date Application Received
Samford University	Entry Base	Homewood, AL	1/4/2016
Samford University	Entry ADT	Homewood, AL	1/4/2016
UNC Charlotte	DA Base	Charlotte, NC	1/25/2016
Florida National University	DA ADT	Hileah, FL	1/25/2016
Bunker Hill Communtiy College	Entry Base	Boston, MA	4/15/2016
Southeast Kentucky Community Tech	Entry Base	Whitesburg, KY	4/18/2016
Horry Georgetown Technical College	Entry Base	Conway, SC	4/26/2016
Kettering College	DA ADT	Kettering, OH	6/20/2016

#### **Approval of Intent Granted**

An Approval of Intent (AOI) is an action taken by the CoARC, following the submission of a Letter of Intent (LOI) Application. An AOI indicates that a sponsoring institution's plan to start a program or program option is acceptable. An AOI authorizes the sponsor to submit a Provisional Accreditation Self-Study Report (PSSR) and to undergo a Provisional Accreditation site visit.

Program #	Program Name (date LOI application received)	Type/Degree	Location	Effective
200620	Samford University (1-4-16)	Entry Base MS	Homewood, AL	3/11/2016
200621	Antillean Adventist University (12-14-15)	Entry Base BS	Mayagez, PR	3/11/2016
210422	University of Texas HSC San Antonio (10-9-15)	Entry ADT BS	San Antonio, TX	3/11/2016
210620	Samford University (1-4-16)	Entry ADT BS	Homewood, AL	3/11/2016
220281	Bellarmine University (11-3-15)	Entry ADT MS	Louisville, KY	3/11/2016
500001	UNC Charlotte (1-25-16)	DA Base BS	Charlotte, NC	3/11/2016
500553	St. Louis College of Health Careers (10-29-15)	DA ADT BS	Fenton, MO	3/11/2016
200622	Horry Georgetown Technical College (4-26-2016)	Entry Base AAS	Conway, WC	6/25/2016
200623	Bunker Hill Community College (4-15-2016)	Entry Base AS	Boston, MA	6/25/2016
200624	Southeast Kentucky Community & Technical College (4-18-2016)	Entry Base AAS	Whitesburg, KY	6/26/2016
500003	Florida National University (1-25-2016)	DA ADT BS	Hialeah, FL	6/25/2016
500004	Kettering College	DA ADT BS	Kettering, OH	11/12/2016



#### **Provisional Accreditation Granted**

Provisional Accreditation status signifies that a program has demonstrated sufficient compliance with the Standards to initiate a program. Such compliance includes the completion and submission of an acceptable Provisional Accreditation Self Study Report (PSSR) and other documentation required by the CoARC and completion of Provisional on-site visit. The program will remain on Provisional Accreditation until it achieves Continuing Accreditation. The conferral of Provisional Accreditation authorizes the sponsor to admit its first class of students and signifies that the program is recognized by the NBRC, thus providing graduates of these programs with eligibility to the Respiratory Care Credentialing Examination(s). After at least three (3) years of outcomes have been collected, reported and analyzed (i.e. following the graduation of at least 3 cohorts of students), a provisionally accredited program may apply for Continuing Accreditation. If the program does not progress to Continuing Accreditation, enrolled students completing a program under Provisional Accreditation are still considered graduates of a CoARC accredited program.

Program #	Program Name (date AOI granted)	Location	Effective
200620	Samford University (3/11/2016)	Birmingham, AL	6/25/2016
210422	University of Texas Health Science Center (3/11/2016)	San Antonio, TX	6/25/2016
210620	Samford University (3/11/2016)	Birmingham, AL	6/25/2016
220281	Bellarmine University (3/11/2016)	Louisville, KY	6/25/2016
400171	Tyler Junior College SDS Option (11/15/2014)	Tyler, TX	11/12/2016

#### **Continuing Accreditation Granted**

Continuing Accreditation is conferred when 1) an established, program with Continuing Accreditation demonstrates compliance with the *Standards* following submission of an acceptable continuing accreditation self-study report and completion of an on-site visit, or 2) a program holding Provisional Accreditation has demonstrated compliance with the *Standards* during the Provisional Accreditation period. Continuing Accreditation remains in effect until it is withdrawn: either voluntarily - the program withdraws from the accreditation process; or involuntarily - accreditation is withdrawn by the CoARC because of the program's failure to comply with the *Standards*.

Program #	Program Name	Location	Next Re- evaluation
200017	Foothill College	Los Altos Hills, CA	2026
200019	Mansfield University	Sayre, PA	2026
200037	Quinsigamond Community College	Worcester, MA	2026
200066	SUNY Upstate Medical University	Syracuse, NY	2026
200103	El Centro College	Dallas, TX	2026
200143	CHI Health/Midland University	Omaha, NE	2026
200172	Mayo Clinic College of Medicine	Rochester, MN	2026
200208	Texas Southern University (CA + RCS-PR)	Houston, TX	2026
200261	Southern Community College – Lincoln	Lincoln, NE	2026
200313	West Chester University/Bryn Mawr Hospital	Bryn Mawr, PA	2026
200368	Nebraska Methodist College	Omaha, NE	2026
200369	Molloy College	Rockville Centre, NY	2026
200385	Pittsburgh Career Institute	Pittsburgh, PA	2026
200386	Delaware Technical and Community College	Georgetown, DE	2026
200399	Volunteer State Community College	Gallatin, TN	2026
200410	Fletcher Technical Community College	Houma, LA	2026



200424	Middle Georgia State University	Macon, GA	2026
200496	Orangeburg-Calhoun Technical College	Orangeburg, SC	2026
200008	Trident Technical College	Charleston, SC	2026
200081	Springfield Technical Community College	Springfield, MA	2026
200116	Borough of Manhattan Community College	New York, NY	2026
200256	Columbia State Community College	Columbia, TN	2026
200307	Alvin Community College	Alvin, TX	2026
200312	Jefferson College of Health Sciences	Roanoke, VA	2026
200317	Florida SouthWestern State College	Fort Myers, FL	2026
200328	Illinois Central College	Peoria, IL	2026
200345	Central New Mexico Community College	Albuquerque, NM	2026
200431	Pickens Technical College	Aurora, CO	2026
200435	Genesee Community College	Batavia, NY	2026
200450	Collins Career Technical Center	Chesapeake, OH	2026
200476	Chippewa Valley Technical College	Eau Claire, WI	2026
200494	Pima Medical Institute – Chula Vista	Chula Vista, CA	2026
200581	Spencerian College	Louisville, KY	2021
200591	Shelton State Community College	Tuscaloosa, AL	2021
210273	York College of PA	York, PA	2026
200027	Durham Technical Community College	Durham, NC	2026
200149	Del Mar College	Corpus Christi, TX	2026
200171 200176	Tyler Junior College	Tyler, TX	2026 2026
200176	University of Arkansas for Medical Sciences Parkland College	Little Rock, AR Champaign, IL	2026
200185	Brookdale Community College	Lincroft, NJ	2026
200229	Sandhills Community College	Pinehurst, NC	2026
200248	Wallace Community College	Dothan, AL	2026
200249	River Valley Community College	Claremont, NH	2026
200275	Tidewater Community College	Virginia Beach, VA	2026
200301	J. Sargeant Reynolds Community College	Richmond, VA	2026
200314	Ivy Tech Community College-Fort Wayne	Fort Wayne, IN	2026
200315	Stanly Community College	Locust, NC	2026
200322	Salisbury University	Salisbury, MD	2026
200327	Great Falls College Montana State University	Great Falls, MT	2026
200370	Palm Beach State College	Palm Beach Gardens, FL	2026
200387	Reading Area Community College	Reading, PA	2026
200413	University of Texas Medical Branch	Galveston, TX	2026
200419	Darton State College	Albany, GA	2026
200433	Brightwood College	Salida, CA	2026
200438	McLennan Community College	Waco, TX	2026
200463	Autry Technology Ctr/Northern OK College	Enid, OK	2026
200490	Stevens-Henager College	Salt Lake City, UT	2026
200501	Ivy Tech Community College-Sellersburg	Sellersburg, IN	2026
200582	Coahoma Community College	Clarksdale, MS	2021
200588	Platt College-Ontario	Ontario, CA	2021
200596	Platt College-Alhambra	Alhambra, CA	2021



#### Probationary Accreditation Conferred

Probationary Accreditation is a temporary status\* of accreditation conferred when an accredited program is not in compliance with one or more Standards and/or Policies, and progress reports submitted do not demonstrate correction of these deficiencies. Probationary Accreditation can also be conferred when a sponsor receives an adverse accreditation action as described in CoARC Policy 1.07. Following conferral of Probationary Accreditation, the program must file a Probation Report as directed by the CoARC Executive Office. However, if at any time the program can rectify all the deficiencies that resulted in Probationary Accreditation, supported by CoARC's review of the Probation Report, and thereby achieve compliance with the Standards, the CoARC will consider removing probationary status. If compliance with all Standards is not demonstrated within two (2) consecutive years following conferral of Probationary Accreditation, accreditation will be withheld or withdrawn. In no case will probationary status exceed 2 years. If the program remains out of compliance with the Standards at the end of the first year of the two-year probationary period, the CoARC may withdraw accreditation unless it determines that the program is making a good faith effort to come into compliance with the Standards. A decision to confer probation is subject to reconsideration but cannot be appealed (See CoARC Policy 1.06). Enrolled students completing a program that is under Probationary Accreditation are considered graduates of a CoARC accredited program. Programs on Probationary Accreditation are prohibited from increasing cohort and enrollment numbers until Probationary Accreditation is The CoARC requires the sponsor to complete a teach-out plan when: a program placed on removed. probation; requests inactive status; or when accreditation is withdrawn - voluntarily/involuntarily (see CoARC Policy 1.13).

Program #	Program Name	Location	Effective*
200264	Wheeling Jesuit University	Wheeling, WV	11/12/2016
200343	Southern University at Shreveport	Shreveport, LA	11/12/2016
200525	Concorde Career College- San Diego	San Diego, CA	11/12/2016
200599	New England Institute of Technology	East Greenwich, RI	11/12/2016
200606	Pima Medical Institute-Houston	Houston, TX	11/12/2016
320276	Independence University	Salt Lake City, UT	11/12/2016

\*This action does not become final until after the program has exhausted its rights to seek reconsideration (see CoARC Policy 1.07 – Reconsideration and Appeal).

#### **Probationary Accreditation Removed\*\***

\*\*Following review of the Probation Report, Probationary Accreditation was removed and the programs listed below resumed their previous accreditation status.

Program #	Program Name (date initially placed on probation)	Location	Effective
200149	Del Mar College (11-21-15)	Corpus Christi, TX	3/12/2016
200266	Delta College (11-21-15)	University Center, MI	6/25/2016
200557	Florida National University (11-15-14)	Hialeah, FL	11/12/2016
200582	Coahoma Community College (11-21-15)	Clarksdale, MS	11/12/2016
200589	Black River Technical College (11-15-14)	Pocahontas, AR	11/12/2016



<u>Probation Report Reviewed</u>\* \* Following review of the Probation Report, Probationary Accreditation remains for the program listed below.

Program #	Program Name (date initially placed on probation)	Location	Next Action
200266	Delta College (11-21-15)	University Center, MI	Nov 2016
200372	Victoria College (11-21-15)	Victoria, TX	Nov 2016
200543	Medical Education and Training Campus – Air Force (11-21-15)	Ft. Sam Houston, TX	Nov 2016
200551	Miller-Motte Technical College (11-15-14)	Clarksville, TN	Nov 2016
200557	Florida National University (11-15-14)	Hialeah, FL	Nov 2016
200578	San Juan College (11-21-15)	Farmington, NM	Nov 2016
200579	Pierpont Community & Technical College (11-15-14)	Fairmont, WV	Nov 2016
200582	Coahoma Community College (11-21-15)	Clarksdale, MS	Nov 2016
200589	Black River Technical College (11-15-14)	Pocahontas, AR	Nov 2016
200372	Victoria College (11-21-15)	Victoria, TX	Mar 2017
200543	Medical Education and Training Campus – Air Force (11-21-15)	Ft. Sam Houston, TX	Mar 2017
200578	San Juan College (11-21-15)	Farmington, NM	Mar 2017

#### **Progress Reports Reviewed\***

\*All programs listed below are required to submit an additional Progress Report (PR).

For general information about progress reports, please visit <u>www.coarc.com/57.html</u>. For detailed information on the actions taken by the CoARC Board, please visit the Accreditation Actions document (www.coarc.com/11.html) for the specific Board meeting date.

Program #	Program Name	Location	Next CoARC Mtg
200051	Shenandoah University	Winchester, VA	Nov 2016
200061	University of District of Columbia	Washington, DC	Nov 2016
200108	Ferris State University	Big Rapids, MI	Nov 2016
200264	Wheeling Jesuit University	Wheeling, WV	Nov 2016
200276	California College San Diego	San Diego, CA	Nov 2016
200300	Daytona State College	Daytona Beach, FL	Nov 2016
200303	Midland College	Midland, TX	Nov 2016
200315	Stanly Community College	Locust, NC	Nov 2016
200329	Muskegon Community College	Muskegon, MI	Nov 2016
200340	Northland Community & Technical College	East Grand Forks, MN	Nov 2016
200343	Southern University at Shreveport	Shreveport, LA	Nov 2016
200419	Darton State College	Albany, GA	Nov 2016
200433	Brightwood College (formerly Kaplan College)	Salida, CA	Nov 2016
200438	McLennan Community College	Waco, TX	Nov 2016
200442	Howard College	San Angelo, TX	Nov 2016
200469	Concorde Career College	Memphis, TN	Nov 2016
200512	Brightwood Career Institute – Philadelphia Mills	Philadelphia, PA	Nov 2016
200525	Concorde Career College	San Diego, CA	Nov 2016
200530	Northwest Kansas Technical College	Goodland, KS	Nov 2016
200559	Concorde Career Institute	Miramar, CA	Nov 2016



200571	Keiser University	Ft. Lauderdale, FL	Nov 2016
200576	South Arkansas Community College	El Dorado, AR	Nov 2016
200586	Simi Valley Adult School	Simi Valley, CA	Nov 2016
200587	St. Augustine College	Chicago, IL	Nov 2016
200599	New England Institute of Technology	East Greenwich, RI	Nov 2016
200600	Sullivan Respiratory Care Consortium	Loch Sheldrake, NY	Nov 2016
200602	American College for Medical Careers	Orlando, FL	Nov 2016
200605	Arkansas State University Mid-South	West Memphis, AR	Nov 2016
200606	Pima Medical Institute	Houston, TX	Nov 2016
200608	YTI Career Institute	Altoona, PA	Nov 2016
200610	Hartnell College	Salinas, CA	Nov 2016
220133	St. Alexis Medical Center/University of Mary	Bismarck, ND	Nov 2016
300025	Monroe City Hall Annex	West Monroe, LA	Nov 2016
320276	Independence University	Salt Lake City, UT	Nov 2016
300027	University of Arkansas for Medical Sciences	Texarkana, AR	Nov 2016
200061	University of District of Columbia Community College	Washington, DC	Mar 2017
200208	Texas Southern University	Houston, TX	Mar 2017
200300	Daytona State College	Daytona Beach, FL	Mar 2017
200303	Midland College	Midland, TX	Mar 2017
200340	Northland Community & Technical College	East Grand Forks, MN	Mar 2017
200419	Darton State College	Albany, GA	Mar 2017
200438	McLennan Community College	Waco, TX	Mar 2017
200442	Howard College	San Angelo, TX	Mar 2017
200469	Concorde Career College- Memphis	Memphis, TN	Mar 2017
200492	St. Luke's College-Unity Point Health	Sioux City, IA	Mar 2017
200512	Brightwood Career Institute-Philadelphia Mills	Philadelphia, PA	Mar 2017
200530	Northwest Kansas Technical College	Goodland, KS	Mar 2017
200576	South Arkansas Community College	El Dorado, AR	Mar 2017
200586	Simi Valley Adult School/Excelsior	Simi Valley, CA	Mar 2017
200587	St. Augustine College	Chicago, IL	Mar 2017
200602	American College for Medical Careers	Orlando, FL	Mar 2017
200605	Arkansas State University Mid-South	West Memphis, FL	Mar 2017
200608	YTI Career Institute-Altoona	Altoona, PA	Mar 2017
200610	Hartnell College	Salinas, CA	Mar 2017
220133	St. Alexius Medical Center/University of Mary	Bismarck, ND	Mar 2017

#### Progress Report Reviewed (Final)\*

The CoARC requires a program to submit documentation addressing any *Standard* not met (i.e. a citation) as a progress report. The CoARC may request a Standardized Progress Report (series of questions developed by the CoARC) for a variety of deficiencies including failing to meet thresholds for the following outcomes: attrition, credentialing success, graduate and employer satisfaction, and on-time graduation rate. The decision to request a progress report is made by the Program Referee or the Executive Office during the accreditation review process. The progress report addressing the standard(s) with which the program has been found to be in non-compliance must be submitted before the specified deadline. The progress report will constitute the basis for subsequent Commission action. If the program comes into compliance with all the CoARC *Standards*, the action will be to accept the report. If the report does not demonstrate compliance with the *Standards*, or if it was not submitted within the time frame specified in the request for the progress report,



the Commission may either (1) request an additional progress report or (2) confer a Probationary Accreditation status. For general information about progress reports, please visit <u>www.coarc.com/57.html</u>. For detailed information on the actions taken by the CoARC Board, please visit the Accreditation Actions document (<u>www.coarc.com/11.html</u>) for the specific Board meeting date.

Program #	Program Name	Location	Next Re- evaluation
200389	San Juan Valley College	Visalia, CA	2025
200474	Oconee Fall Line Technical College	Dublin, GA	2023
200051	Shenandoah University	Winchester, VA	2025
200108	Ferris State University	Big Rapids, MI	2024
200174	El Paso Community College	El Paso, TX	2025
200276	California College San Diego	San Diego, CA	2025
200315	Stanly Community College	Locust, NC	2026
200329	Muskegon Community College	Muskegon, MI	2019
200433	Brightwood College	Salida, CA	2026
200559	Concorde Career Institute- Miramar	Miramar, FL	2017
200571	Keiser University	Ft. Lauderdale, FL	2017
200600	Sullivan Respiratory Care Consortium	Loch Sheldrake, NY	2018
200620	Samford University	Birmingham, AL	TBD
210620	Samford University	Birmingham, AL	TBD
300025	Monroe City Hall Annex	West Monroe, LA	2021

\*All Progress Reports were accepted as final for the programs listed below.

#### Withhold Accreditation\*

A program seeking Provisional Accreditation or Continuing Accreditation may have such accreditation status withheld if, following submission of a self-study and completion of an on-site evaluation, the accreditation review process confirms that the program is not in compliance with the Standards. A program that has had its accreditation status withheld can no longer admit students. The CoARC requires a sponsor to formulate and complete a teach-out plan when the CoARC acts to withhold/withdraw a program's accreditation (see Policy <u>1.13</u>). Enrolled students who satisfactorily complete the program during the teach-out are considered graduates of a CoARC accredited program. \*This action does not become final until after the program has exhausted its rights to seek reconsideration and to file an appeal (see CoARC Policy <u>1.06</u> – Reconsideration and Appeal).

Withhold of Accreditation was not conferred in 2016.



#### Withdrawal Accreditation – Involuntary\*

This status is conferred when an accredited program is not in compliance with the Accreditation Standards and has failed to address cited deficiencies to the satisfaction of the CoARC. Specific circumstances warranting a withdrawal of accreditation are described in CoARC Policy 1.057. A program that has had its accreditation status withdrawn cannot admit students. When the CoARC confers Withdrawal of Accreditation, the CoARC requires the sponsor to formulate and complete a teach-out plan for any students remaining in the program (see CoARC Policy 1.13). For programs that receive a Withdrawal of Accreditation status, enrolled students who satisfactorily complete the program teach-out are considered graduates of a CoARC accredited program.

\*This action does not become final until after the program has exhausted its rights to seek reconsideration and to file an appeal (see CoARC Policy 1.06 – Reconsideration and Appeal).

Involuntary Withdrawal of Accreditation was not conferred in 2016.

#### Withdrawal Accreditation - Voluntary

This status is conferred when a sponsor notifies the CoARC that it wants its program(s) to be removed from the accreditation process. Sponsoring institutions may notify the CoARC of Voluntary Withdrawal of Accreditation, at any time, either for all activities of the program or for any program options. For programs that receive a 'Withdrawal of Accreditation – Voluntary' status, enrolled students who satisfactorily complete the teach-out are considered graduates of a CoARC accredited program (See CoARC Policy 1.06 for Reconsideration and Appeal Policy).

Program #	Program Name	Degree Conferred	Location	Effective
200113	Jackson State Community College	AS	Jackson, TN	10/27/2015
200181	University of Alabama at Birmingham	BS	Birmingham, AL	12/31/2015
300002	Mercy Memorial Hospital (satellite)	AAS	Ardmore, OK	12/31/2015
200439	Southern Regional Technical College	AAS	Thomasville, GA	2/8/2016
200579	Pierpont Community & Technical College	AAS	Fairmont, WV	5/16/2016
300027	University of Arkansas for Medical Sciences	BS	Texarkana, AR	6/1/2016
200503	Rolla Technical Institute/Center	AAS	Rolla, MO	8/1/2016
200551	Miller-Motte Technical College	AS	Clarksville, TN	10/28/2016

#### **Inactive Accreditation - Voluntary**

Base programs and/or program options on Administrative Probation or with a status of Continuing Accreditation without any pending Progress Reports are eligible to request inactive status for up to two years. No students may be enrolled or matriculated in the program while the program is on inactive status. Programs offering additional options may request voluntary inactive status for these program options without affecting the accreditation status of the base program. The Inactive Status does not affect the date of the next scheduled site visit. During inactive status, programs must continue to submit documents (e.g., annual reports) and pay applicable fees, unless otherwise directed by the CoARC. The CoARC requires a sponsor to formulate and complete a teach-out plan when a program requests inactive status (see CoARC Policy 1.13).

Inactive Accreditation was not conferred in 2016



#### **Administrative Probation**

Administrative Probation is conferred when a program, or any program option with a separate CoARC ID number, does not comply with any of the CoARC's administrative requirements. Administrative Probation status will not affect the eligibility of its students for the NBRC Examinations. During a period of Administrative Probation, all listings of a program's accreditation status must include the words "Administrative Probation". Following conferral of Administrative Probation, failure of the program to provide requested material/fees etc. will result in the program's being placed on the agenda of the next scheduled CoARC meeting for consideration of Withhold or Withdrawal of Accreditation (see CoARC Accreditation Policy 1.054 and 1.057). If conferral of Administrative Probation was for failure to meet personnel requirements, the deficiency will be brought before the CoARC Board at its next meeting and may result in an adverse accreditation decision (see CoARC Accreditation Policy 6.011I).

Program #	Program Name (date Admin Pro Conferred)	Location	Reason	Date Admin Pro Removed
200440	Concorde Career College – North Hollywood (9-26-2016)	North Hollywood, CA	RCS Non submission	9/29/2016

#### Site Visits Conducted

A site visit is the most complex aspect of the accreditation process. It is also the most visible function of the CoARC. Site visitation teams usually have two members, one of whom may (and in some cases, must) be a physician. Site visitors are trained to be objective on-site observers and gatherers of data, which are then reported back to the CoARC Referee. During the campus visit, site visitors interact with all of the communities of interest, review pertinent documents, and, when appropriate, inspect program facilities. Through this process, the CoARC ensures that the documentation provided to the CoARC prior to the visit-supports the program's analysis and action plans related to its resources and outcomes. Further, the visit offers an opportunity to confirm the extent to which the program meets the Standards. Further details regarding the site visit process can be found at <u>http://www.coarc.com/32.html</u>. In 2016, there were a total of 72 site visits, listed below.

Program #	Program Name	Location	Dates of Site Visit in 2016
200008	Trident Technical College	Charleston, SC	Jan 14-15
200030	Bluegrass Community & Tech College	Lexington, KY	Nov 3-4
200027	Durham Tech Community College	Durham, NC	April 4-5
200039	Indiana Resp Therapy Ed Consortium	Indianapolis, IN	Oct 10-11
200081	Springfield Tech Community College	Springfield, MA	April 21-22
200011	Forsyth Tech & Community College	Winston-Salem, NC	Oct 27-28
200116	Borough of Manhattan Community College	New York, NY	April 7-8
200143	CHI Health/Midland University	Omaha, NE	Jan 29-30
200149	Del Mar College	Corpus Christi, TX	April 4-5
200168	Community College of Philadelphia	Philadelphia, PA	Sept 29-30
200171/400171	Tyler Junior College	Tyler, TX	July 14-15
200176	University of Arkansas for Med Sciences	Little Rock, AR	June 20-21
200180	Parkland College	Champagne, IL	Sept 19-20
200185	Brookdale Community College	Lincroft, NJ	April 11-12
200206	Northern Virginia Community College	Springfield, VA	Oct 6-7
200222	South Plains College	Lubbock, TX	Oct 27-28
200229	Sandhills Community College	Pinehurst, NC	April 21-22



200242	Lakaland Community Collago	Kirtland OH	Sant 10, 20
200242	Lakeland Community College	Kirtland, OH	Sept 19-20
200248	Wallace Community College	Dothan, AL	Sept 26-27
200249	River Valley Community College	Claremont, NH	June 16-17
200256	Columbia State Community College	Columbia, TN	April 25-26
200261	Southeast Community College	Lincoln, NE	Feb 1-2
200275	Tidewater Community College	Virginia Beach, VA	Oct 3-4
200301	J Sergeant Reynolds Community College	Richmond, VA	July 28-29
200307	Alvin Community College	Alvin, TX	May 5-6
200312	Jefferson College of Health Sciences	Roanoke, VA	Feb 29-Mar 1
200314	Ivy Tech Community College	Fort Wayne, IN	June 16-17
200315	Stanly Community College	Locust, NC	Jan 28-29
200317	Florida Southwestern State College	Fort Myers, FL	Feb 15-16
200322	Salisbury University	Salisbury, MD	Sept 29-30
200327	Great Falls College/Montana State Univ	Great Falls, MT	June 16-17
200328	Illinois Central College	Peoria, IL	May 12-13
200345	Central New Mexico Community College	Albuquerque, NM	Feb 25-26
200370	Palm Beach State College	Palm Beach Gardens, FL	Sept 8-9
200387	Reading Area Community College	Reading, PA	Sept 8-9
200413	UT Medical Branch at Galveston	Galveston, TX	June 16-17
200419	Darton State College	Albany, GA	June 20-21
200424	Middle Georgia State College	Macon, GA	Jan 14-15
200431	Pickens Technical College	Aurora, CO	Jan 21-22
200433	Kaplan College	Modesto, CA	Mar 10-11
200435	Genesee Community College	Batavia, NY	Feb 11-12
200438	McLennan Community College	Waco, TX	Oct 13-14
200444	Moraine Park Technical College	Fond du Lac, WI	Nov 10-11
200445	Community College of Baltimore County	Baltimore, MD	Nov 7-8
200450	Collins Career Center	Chesapeake, OH	Mar 14-15
200463	Autry Technology Ctr/Northern OK College	Enid, OK	May 9-10
200476	Chippewa Valley Technical College	Eau Claire, WI	May 9-10
200490	Stevens-Henager College	Murray, UT	May 19-20
200494	Pima Medical Institute	Chula Vista, CA	Feb 25-26
200498	Concorde Career College	San Bernardino, CA	Sept 22-23
200501	Ivy Tech Community College	Sellersburg, IN	April 25-26
200502	Ivy Tech Community College	Wabash Valley, IN	Nov 3-4
200551	Miller-Motte Technical College	Clarksville, TN	Nov 7-8
200558	Pennsylvania College of Health Sciences	Lancaster, PA	Sept 29-30
200566	American Career College	Ontario, CA	Oct 17-18
200567	Laurel Technical Institute	Sharon, PA	Dec 1-2
200572/22572	Rush University Medical Center	Rush, PA	Nov 7-8
200559	Concorde Career College	Miramar, FL	Oct 27-28
200574	Kent State University	Ashtabula, OH	Nov 3-4
200578	San Juan College	Farmington, NM	Oct 31-Nov 1
200581	Spencerian College	Louisville, KY	Mar 10-11
200582	Coahoma Community College	Clarksdale, MS	Sept 26-27
200585	Medical Education & Training	JBSA Fort Sam	Nov 14-15
200000	Campus/Univ of the Incarnate Word	Houston, TX	

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200587	St. Augustine College	Chicago, IL	Dec 1-2
200588	Platt College	Ontario, CA	June 2-3
200591	Shelton State Community College	Tuscaloosa, AL	June 2-3
200593	Concorde Career College	San Antonio, TX	Dec 8-9
200596	Platt College	Alhambra, CA	July 18-19
210273	York College of PA	York, PA	Mar 10-11
210422	University of Texas Health Sciences Ctr	San Antonio, TX	May 12-13
220281	Bellarmine University	Louisville, KY	May 23-24
200620/210620	Samford University	Birmingham, AL	June 2-3

#### **Applications for Substantive Change**

A substantive change is any modification, affecting either the program or the program's sponsor, that the CoARC has determined to have the potential to affect program outcomes and thus requires the program to notify the CoARC prior to its occurrence (<u>http://www.coarc.com/42.html</u>.) The sponsor must report substantive change(s) to the CoARC for approval prior to the intended date of implementation, except for either an adverse action by the sponsor's institutional accrediting agency, a change in the program sponsor's institutional accreditation status or changes that are emergent or unexpected (see Accreditation Policy 1.07). While the decision to implement a substantive change is an institutional prerogative and/or responsibility, the CoARC is obligated to assess the potential of any substantive change to adversely affect the program's ability to meet the *Standards* and Policies.

Program #	Program Name	State	Policy #	Date Approved
200286	University of Pittsburgh at Johnstown	PA	9.10	1/14/2016
200324	James A. Rhodes State College	OH	9.04	1/15/2016
200419	Darton State College	GA	9.03, 9.04	2/5/2016
200607	San Joaquin Valley College-Temecula	CA	9.04	3/4/2016
200216	Columbus State Community College	OH	9.04	3/15/2016
200436	Washington State Community College	OH	9.04	3/29/2016
200335	North Central State College	OH	9.04	4/1/2016
200146	Tulsa Community College	OK	9.04	4/12/2016
200211	Central Piedmont Community College	NC	9.10	4/25/2016
200516	Southern State Community College-Fayette	OH	9.04	5/11/2016
200260	Cincinnati State Tech-Community College	OH	9.04	6/13/2016
200489	Southwestern Illinois College	IL	9.01, 9.03, 9.11	6/15/2016
200293	Texas Southmost College	TX	9.04	6/14/2016
200344	Seattle Central College	WA	9.11	7/20/2016
200397	Frederick Community College	MD	9.11	7/25/2016
200260	Cincinnati State Tech-Community College	OH	9.04	6/13/2016
200489	Southwestern Illinois College	IL	9.01, 9.03, 9.11	6/15/2016
200293	Texas Southmost College	TX	9.04	6/14/2016
200344	Seattle Central College	WA	9.11	7/20/2016
200397	Frederick Community College	MD	9.11	7/25/2016
200260	Cincinnati State Tech-Community College	OH	9.04	6/13/2016
200489	Southwestern Illinois College	IL	9.01, 9.03, 9.11	6/15/2016



#### Changes in Program Information and Personnel

The CoARC Executive Office is responsible for maintaining accurate programmatic information. Programs are required to report changes in program name, address, and certain personnel to the CoARC in a timely manner. The following is a list of reported changes from January 1, 2013 through December 31, 2016:

Type of Cha	nge Reported	Number Reported in 2013	Number Reported in 2014	Number Reported in 2015	Number Reported in 2016
Change in P	rogram Name	12	11	11	4
Change in Pro	ogram Address	8	8	2	1
Change in B	illing Contact	28	41	56	38
Change in P	resident/CEO	72	78	73	61
Change	e in Dean	105	79	113	104
Change in	Permanent	53	46	55	49
Program	Temporary	7	3	3	7
Director	Acting	3	7	2	1
Change in	Permanent	69	64	80	83
Director of Clinical	Temporary	29	15	19	22
Education	Acting	5	6	0	2
Change in	Permanent	30	34	28	31
Medical Director	Temporary	0	0	0	0
Change in Co-	Medical Director	6	4	3	2
_	ry Sleep Specialist ructor	2	0	1	0
Total # of Cha	inges Reported	429	396	446	405

Of the 53 permanent changes in Program Director in 2013, 13 were due to retirement, 11 to resignation, 17 to re-assignment and 8 were due to other reasons. Four did not provide a reason.

Of the 46 permanent changes in Program Director in 2014, 12 were due to retirement, 13 to resignation, 9 to re-assignment and 8 were due to other reasons. Four did not provide a reason.

Of the 55 permanent changes in Program Director in 2015, 18 were due to retirement, 15 to resignation, 13 to re-assignment and 9 were due to other reasons.

Of the 49 permanent changes in Program Director in 2016, 20 were due to retirement, 14 to resignation, 6 to re-assignment and 9 were due to other reasons.



#### 2016 ANNUAL REPORT OF CURRENT STATUS (RCS)

#### **Overview**

The CoARC defines program outcomes as "performance indicators that reflect the extent to which the goals of the program are achieved and by which program effectiveness is documented. Examples include but are not limited to: program completion rates, job placement rates, certification pass rates, and graduate satisfaction" (2015 Standards, p.47). Outcomes measures used by the CoARC reflect metrics of program effectiveness and student achievement. The CoARC uses an outcomes-centered approach in its accreditation review process. This approach focuses on a specific set of outcomes which include the following: a) Graduate performance on the national credentialing examination for entry into practice; b) Programmatic retention/attrition; c) Graduate satisfaction with program; d) Employer satisfaction with program graduates; e) Job placement, and (f) On-time graduation rate.

The CoARC believes that continuous assessment of the educational quality of a respiratory care program (inclusive of distance education modalities and program options), will maximize the academic success of the enrolled students in an accountable and cost-effective manner. To achieve this outcome the assessment must be broad-based, systematic, and designed to promote achievement of program goals. The CoARC routinely monitors programmatic outcomes in relation to the CoARC thresholds via program submission of an Annual Report of Current Status (RCS). The CoARC provides definitions of each of the minimum performance criteria in Standard 3.09 (pp.26-27), its *Accreditation Policies & Procedures Manual* (pp. 38-39), and on its website (http://www.coarc.com/15.html).

In May 2011, the CoARC launched its <u>online</u> Annual RCS system with a deadline for submission of July 1<sup>st</sup>, 2011. In preparation for this launch, the CoARC redesigned its reporting tool. The focus of this redesign was to simplify, and increase the accuracy of, data entry for programs. To achieve this goal, the CoARC adopted a reporting system that is *driven by student data*. Programs can now capture and record cohort information that includes individual student data throughout their enrollment in the program. Once a cohort has been created and students for that cohort have been entered into the reporting system, the program can update student data, such as graduation, attrition, credentials earned, and job placement, at any time. This student-specific information is then used to automatically generate aggregate programmatic outcomes data.

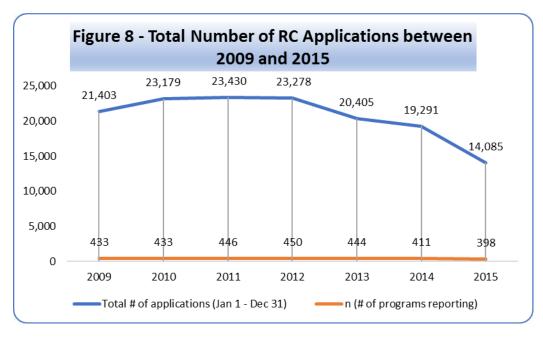
Outcomes are updated on an annual basis with submission of each program's Annual RCS on July 1<sup>st</sup>. The CoARC works with programs throughout the data submission and validation phases to ensure that these performance data are accurate. With the 2015 RCS, the CoARC added overall employer and graduate satisfaction, as well as on-time graduation rates, to the outcomes metrics reported to the public.

The CoARC completed its verification of the outcomes data from the 2016 Annual Report of Current Status (RCS) in November 2016. A total of 445 annual reports (422 base respiratory care programs, 16 satellite program options, and 7 sleep specialist program options) were used to generate the data in this section. Programs on Approval of Intent are not included since they do not have outcomes data to report. These data are reported by program personnel to the CoARC and reflect the aggregate data for the three-year period being reported (January 1, 2013 through December 31, 2015 for the 2016 RCS reports accepted by the CoARC Executive Office). <u>Note: The data do not reflect any changes made to the RCS data after the 2016 RCS report was accepted. Any such changes will be reported in the 2017 RCS reports due July 1, 2017.</u>



#### **Total Applications**

Each year, programs are required to report the number of applications they received. **Figure 8** shows the total number of applications to RC programs from 2009 through 2015. Total applications reached a peak of 23,430 in 2011, and then decreased by 40% between 2011 and 2015. The mean number of applications per program was 35 in 2015, 47 in 2014, 46 in 2013, 52 from 2010 through 2012, and 48 in 2009. The median number of applications per program was 35 in 2015, 32 in 2014, 34 in 2013, 38 in 2012, 40 in 2011, 38 in 2010, and 32 in 2009. Forty programs did not have 2015 application data to report in the 2016 RCS.



Not included in **Figure 8** are the enrollment data for the sleep specialist program options (SSPOs). The total number of applications to SSPOs was 49 in 2015 (n=7), 54 in 2014 (n=5), 50 in 2013 (n=7), 59 in 2012 (n=7), 85 in 2011 (7), 50 in 2010 (n=11), and 65 in 2009 (n=12). The mean number of applications per program option was 10 in 2015, 11 in 2014, 7 in 2013 and 2012, 10 in 2011, 5 in 2010, and 8 in 2009. The median number of applications per program option was 8 in 2015, 10 in 2014, 5 in 2013, 7 in 2012, 10 in 2011, 0 in 2010, and 6 in 2009.



Table 9 – RC Applications by Degree Offered between 2011 and 2015												
Degree Offered	Applic	15 ations 398)	2014 Applications (N=411)		2013 Applications (N=444)		2012 Applications (N=450)		2011 Applications (N=446)*			
	Total	Mean	Total	Mean	Total	Mean	Total	Mean	Total	Mean		
Associate	12,221	36	17,372	49	18,336	48	20,947	54	21,348	55		
Baccalaureate	1,796	32	1,708	31	2,003	33	2,257	40	2,075	36		
Masters	68	34	211	70	66	22	74	25				

#### **RC Applications by Degree Offered**

**Table 9** shows the annual respiratory care applications in relation to the degree offered. There were 14,085 applications in 2015. The 340 programs offering associate degrees accounted for 86.8% of the total number of applications in 2015. This is a 30% decrease compared to 2014 for this category and a 43% decrease when compared to 2011. The mean number of applications per program for this category was 36 in 2015, 49 in 2014, 48 in 2013, 54 in 2012, and 55 in 2011. The median number of applications per program for this category was 25 in 2015, 35 in 2014 and 2013, and 40 in 2012, and 2011.

The 56 programs offering baccalaureate degrees accounted for 12.8% of the total number of applications in 2015. This is a 5.2% increase when compared to 2014 for this category, and a 13.4% decrease when compared to 2011. The mean number of applications per program for this category was 32 in 2015, 31 in 2014, 33 in 2013, 40 in 2012, and 36 in 2011. The median number of applications per program for this category was 26 in 2015, 28 in 2014 and 30 in 2013 through 2011.

The 2 programs offering master's degrees accounted for 0.5% of the total number of applications in 2015. This is a 68% decrease compared to 2014 for this category. The mean number of applications per program for this category was 34 in 2015, 70 in 2014, 22 in 2013 and 25 in 2012. The median number of applications per program for this category was 34 in 2015, 60 in 2014, 20 in 2013 and 30 in 2012.

\*<u>Note</u>: Data from the programs that offered more than one degree type (i.e., Associate and Baccalaureate or Baccalaureate and Masters) were separated in 2013 and a different CoARC number was assigned for each degree offered. These programs no longer report combined data as was the case in the 2012 and 2011 Reports on Accreditation.



Table 10 – RC Applications by Institutional Type between 2011 and 2015										
Institutional Type	2015 Applications (N=398)		2014 Applications (N=411)		2013 Applications (N=444)		2012 Applications (N=450)		2011 Applications (N=446)	
	Total	Mean								
Community or Junior College	9,411	41	11,430	48	12,088	48	13,867	55	13,969	55
Four-Year College or University	2,654	29	3,686	41	4,011	40	4,346	45	4,225	44
Technical or Vocational School	1,615	27	3,465	53	3,617	50	4,211	55	4,344	57
Academic HSC/ Medical Center	191	21	365	33	319	27	402	34	340	28
Career or Technical College	192	24	131	26	189	32	305	44	430	61
U.S. Military	22	11	214	107	181	91	147	74	122	61

#### **RC Applications by Institutional Type**

**Table 10** shows the annual applications for respiratory care programs by institutional type. The 230 programs offered in community or junior colleges accounted for 64.9% of the 14,085 applications in 2015. This is still the largest category but there was an 18% decrease in applications to such institutions compared to 2014 and a 33% decrease compared to 2011. The mean number of applications per program for this category was 41 in 2015, 48 in 2014 and 2013, and 55 in 2012 and 2011. The median number of applications per program for this category was 32 in 2015, 36 in 2014 and 2013, 41 in 2012, and 40 in 2011.

The 90 programs offered in four-year colleges or universities accounted for 18.8% of the total number of applications in 2015. This is a 28% decrease compared to 2014 and a 38% decrease compared to 2011. The mean number of applications per program for this category was 29 in 2015, 41 in 2014, 40 in 2013, 45 in 2012, and 44 in 2011. The median number of applications per program for this category was 22 in 2015, 29 in 2014, 25 in 2013, and 30 in 2012, and 2011.

The 59 programs offered in technical or vocational schools accounted for 11.5% of the total number of applications in 2015. This is a 53% decrease compared to 2014 and a 63% decrease compared to 2011. The mean number of applications per program was 27 in 2015, 53 in 2014, 50 in 2013, 55 in 2012, and 57 in 2011. The median number of applications per program for this category was 20 in 2015, 37 in 2014 and 2013, and 40 in 2012 and 2011.

The 9 programs offered in academic HSC/medical centers accounted for 1.4% of the total number of applications in 2015. This is a 48% decrease compared to 2014 and a 44% decrease compared to 2011. The mean number of applications per program was 21 in 2015, 33 in 2014, 27 in 2013, 34 in 2012, and 28 in 2011. The median number of applications per program for this category was 16 in 2015, 23 in 2014, 30 in 2013, 29 in 2012, and 23 in 2011.

The 8 programs offered in career or technical colleges accounted for 1.4% of the total number of applications in 2015. This is a 47% increase compared to 2014 but a 55% decrease compared to 2011. The mean number of applications per program was 24 in 2015, 26 in 2014, 32 in 2013, 3 in 2012, and 61 in 2011. The median number of applications per program for this category was 26 in 2015, 30 in 2014 and 2013, 34 in 2012, and 41 in 2011.

The 2 programs offered in the U.S. military accounted for 0.2% of the total number of applications in 2015. This is a 90% decrease compared to 2014 and an 82% decrease compared to 2011. The mean and median number of applications per program was 11 in 2015, 107 in 2014, 91 in 2013, 74 in 2012, and 61 in 2011.



Table 11 –RC Applications by Institutional Control/Funding between 2011 and 2015											
Institutional Control/Funding	2015 Applications (N=398)		2014 Applications (N=411)		2013 Applications (N=444)		2012 Applications (N=450)		2011 Applications (N=446)		
	Total	Mean									
Public/Not-For-Profit	12,172	39	14,286	44	15,471	44	17,938	52	17,743	51	
Private/For-Profit (Proprietary)	1,217	26	3,652	70	3,677	65	3,570	63	3,579	63	
Private/Not-For-Profit	674	20	1,139	38	1,076	33	1,623	42	1,986	51	
Federal Government	22	11	214	107	181	91	147	74	122	61	

#### RC Applications by Institutional Control/Funding

**Table 11** shows the annual applications to respiratory care programs in relation to institutional control/funding. The 315 programs controlled/funded by public/not-for-profit institutions accounted for 86.5% of the 14,085 applications in 2015. This is still the largest category but there was a 15% decrease compared to 2014 and a 31% decrease compared to 2011. The mean number of applications per program for this category was 39 in 2015, 44 in 2014 and 2013, 52 in 2012, and 51 in 2011. The median number of applications per program for this category was 30 in 2015, 32 in 2015, 32 in 2014, 33 in 2013, 37 in 2012, and 40 in 2011.

The 47 programs controlled/funded by private/for-profit (proprietary) institutions accounted for 8.6% of the total number of applications in 2015. This is a 67% decrease compared to 2014 and a 66% decrease compared to 2011. The mean number of applications per program for this category was 26 in 2015, 70 in 2014, 65 in 2013, 63 in 2012 and 2011. The median number of applications per program for this category was 20 in 2015, 52 in 2014, 45 in 2013, 48 in 2012, and 55 in 2011.

The 34 programs controlled/funded by private/not-for-profit institutions accounted for 4.8% of the total number of applications in 2015. This is a 41% decrease compared to 2014 and a 66% decrease compared to 2011. The mean number of applications per program for this category was 20 in 2015, 38 in 2014, 33 in 2013, 42 in 2012, and 51 in 2011. The median number of applications per program for this category was 16 in 2015, 26 in 2014, 23 in 2013, 25 in 2012, and 21 in 2011.

The 2 programs controlled/funded by the federal government accounted for 0.2% of the total number of applications in 2015. This is a 90% decrease compared to 2014 and an 82% decrease compared to 2011. The mean and median number of applications per program was 11 in 2015, 107 in 2014, 91 in 2013, 74 in 2012, and 61 in 2011.



#### Applications by State (including D.C.) and Degree

**Table 12** provides data on applications to respiratory care programs for 2010-2015 by state and degree offered. As expected, California continues to have the largest (12.9% of total in 2015) number of applications.

Table 12 -	-Applications	by State (inclu	uding D.C.) ar	nd Degree bet	ween 2010 ar	nd 2015	
State (# of programs reporting)	Degree	2015 Applications (N=398)	2014 Applications (N=411)	2013 Applications (N=444)	2012 Applications (N=450)	2011 Applications (N=446)	2010 Applications (N=433)
AL (n=5)	Total	335	290	336	373	374	357
4	Associate	300	260	265	277	275	272
1	Baccalaureate	35	30	71	96	99	85
AR (n=8)	Total	252	251	239	294	259	210
7	Associate	240	225	234	235	188	171
1	Baccalaureate	12	26	5	59	71	39
AZ (n=5)	Total	170	522	512	621	760	651
5	Associate	170	522	512	621	760	651
0	Baccalaureate	0	0	0	0	0	0
CA (n=36)	Total	1,819	3,349	3,281	3,648	3,490	3,359
35	Associate	1,765	3,317	3,252	3,613	3,469	3,323
1	Baccalaureate	54	32	29	35	21	36
CO (n=4)	Total	77	168	154	140	156	170
4	Associate	77	168	154	140	156	170
0	Baccalaureate	0	0	0	0	0	0
CT (n=5)	Total	240	235	257	256	243	258
4	Associate	215	205	227	230	213	233
1	Baccalaureate	25	30	30	26	30	25
DC (n=1)	Total	15	12	18	N/A	26	23
1	Associate	15	12	18	N/A	26	23
0	Baccalaureate	0	0	0	0	0	0
DE (n=2)	Total	72	95	96	112	91	81
2	Associate	72	95	96	112	91	81
0	Baccalaureate	0	0	0	0	0	0
FL (n=24)	Total	905	1,092	1,251	1,437	1,658	1,667
21	Associate	858	1,057	1,221	1,407	1,628	1,637
2	Baccalaureate	47	35	30	30	30	30
GA (n=15)	Total	391	585	648	938	697	672
11	Associate	222	451	518	703	537	519
3	Baccalaureate	161	123	110	205	160	153
1	Masters	8	11	20	30	N/A	N/A
HI (n=1)	Total	18	25	N/A	40	48	37
1	Associate	18	25	N/A	40	48	37
0	Baccalaureate	0	0	0	0	0	0

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State (# of programs reporting)	Degree	2015 Applications (N=398)	2014 Applications (N=411)	2013 Applications (N=444)	2012 Applications (N=450)	2011 Applications (N=446)	2010 Applications (N=433)
IA (n=6)	Total	189	233	260	320	259	229
6	Associate	189	233	260	320	259	229
0	Baccalaureate	0	0	0	0	0	0
ID (n=3)	Total	65	77	81	108	100	123
2	Associate	25	26	37	48	35	58
1	Baccalaureate	40	51	44	60	65	65
IL (n=12)	Total	402	643	581	617	704	753
12	Associate	402	488	501	591	639	688
0	Baccalaureate	N/A	15	36	26	65	65
0	Masters	N/A	140	44	44	5	N/A
IN (n=11)	Total	317	310	356	426	474	482
9	Associate	236	270	301	358	429	437
2	Baccalaureate	81	40	55	68	45	45
KS (n=9)	Total	155	203	217	236	248	248
8	Associate	147	181	202	217	230	227
1	Baccalaureate	8	22	15	19	18	21
KY (n=12)	Total	343	397	388	620	500	468
10	Associate	313	354	372	620	486	448
2	Baccalaureate	30	43	16	N/A	14	15
LA (n=9)	Total	212	225	254	276	263	284
6	Associate	168	203	226	250	230	263
3	Baccalaureate	44	22	28	26	33	21
MA (n=5)	Total	285	245	276	334	363	366
5	Associate	285	245	276	334	363	366
0	Baccalaureate	0	0	0	0	0	0
MD (n=6)	Total	277	310	360	386	325	322
5	Associate	207	250	235	266	245	272
1	Baccalaureate	70	60	125	120	80	50
ME (n=2)	Total	69	78	85	98	86	86
2	Associate	69	78	85	98	86	86
0	Baccalaureate	0	0	0	0	0	0
MI (n=11)	Total	411	404	476	561	697	1,008
11	Associate	411	404	476	561	697	1,008
0	Baccalaureate	0	0	0	0	0	0
MN (n=5)	Total	144	185	170	190	179	202
3	Associate	115	137	125	136	139	142
2	Baccalaureate	29	48	45	54	40	60



State (# of programs reporting)	Degree	2015 Applications (N=398)	2014 Applications (N=411)	2013 Applications (N=444)	2012 Applications (N=450)	2011 Applications (N=446)	2010 Applications (N=433)
MO (n=9)	Total	192	242	262	379	333	315
7	Associate	164	219	242	361	318	300
2	Baccalaureate	28	23	20	18	15	15
MS (n=8)	Total	383	393	395	649	670	753
8	Associate	383	393	395	649	670	753
0	Baccalaureate	0	0	0	0	0	0
MT (n=2)	Total	35	32	39	50	47	50
2	Associate	35	32	39	50	47	50
0	Baccalaureate	0	0	0	0	0	0
NC (n=14)	Total	618	703	795	834	880	1,024
14	Associate	618	703	795	834	880	1,024
0	Baccalaureate	0	0	0	0	0	0
ND (n=2)	Total	22	21	29	35	25	22
0	Associate	0	0	0	0	0	0
2	Baccalaureate	22	21	27	35	25	22
0	Masters	N/A	0	2	N/A	N/A	N/A
NE (n=4)	Total	76	100	121	110	137	129
3	Associate	66	95	106	100	122	119
1	Baccalaureate	10	5	15	10	15	10
NH (n=1)	Total	18	25	10	5	20	24
1	Associate	18	25	10	5	20	24
0	Baccalaureate	0	0	0	0	0	0
NJ (n=7)	Total	240	364	400	765	580	324
5	Associate	170	336	354	525	490	324
2	Baccalaureate	70	28	46	240	90	N/A
NM (n=6)	Total	120	115	148	140	163	180
6	Associate	120	115	148	140	163	180
0	Baccalaureate	0	0	0	0	0	0
NV (n=3)	Total	59	194	285	286	210	223
3	Associate	59	194	285	286	210	223
0	Baccalaureate	0	0	0	0	0	0
NY (n=12)	Total	878	948	897	896	844	766
10	Associate	815	847	759	752	729	634
2	Baccalaureate	63	101	138	144	115	132
OH (n=20)	Total	667	847	979	1,032	1,167	1,132
16	Associate	516	676	775	855	998	955
4	Baccalaureate	151	171	204	177	169	177



State (# of programs reporting)	Degree	2015 Applications (N=398)	2014 Applications (N=411)	2013 Applications (N=444)	2012 Applications (N=450)	2011 Applications (N=446)	2010 Applications (N=433)
OK (n=5)	Total	110	185	172	238	235	236
5	Associate	110	185	172	238	235	236
0	Baccalaureate	0	0	0	0	0	0
OR (n=4)	Total	158	142	155	237	182	185
3	Associate	128	120	134	207	152	160
1	Baccalaureate	30	22	21	30	30	25
PA (n=21)	Total	732	937	1,067	1,141	1,263	1,190
16	Associate	453	677	867	876	1,042	1,013
5	Baccalaureate	279	260	200	265	221	177
RI (n=2)	Total	48	88	87	91	30	41
2	Associate	48	88	87	91	30	41
0	Baccalaureate	0	0	0	0	0	0
SC (n=7)	Total	168	186	218	251	223	259
7	Associate	168	186	218	251	223	259
0	Baccalaureate	0	0	0	0	0	0
SD (n=2)	Total	34	29	30	31	35	20
2	Associate	34	29	30	31	35	20
0	Baccalaureate	0	0	0	0	0	0
TN (n=10)	Total	390	521	556	627	618	597
7	Associate	268	409	418	482	480	470
3	Baccalaureate	122	112	138	145	138	127
TX (n=32)	Total	982	1,515	1,578	1,388	1,489	1,410
27	Associate	744	1,265	1,312	1,205	1,271	1,199
4	Baccalaureate	178	190	266	183	218	211
1	Master's	60	60	0	0	0	0
UT (n=5)	Total	91	520	592	492	664	662
2	Associate	3	448	451	460	630	634
3	Baccalaureate	88	72	141	32	34	28
VA (n=8)	Total	285	457	520	507	536	426
5	Associate	217	377	440	445	465	344
3	Baccalaureate	68	80	80	62	71	82
VT (n=1)	Total	33	40	40	40	40	40
1	Associate	33	40	40	40	40	40
0	Baccalaureate	0	0	0	0	0	0
	Total	193	179	214	229	245	253
WA (n=5)							
WA (n=5) 4	Associate	163	151	164	229	245	253

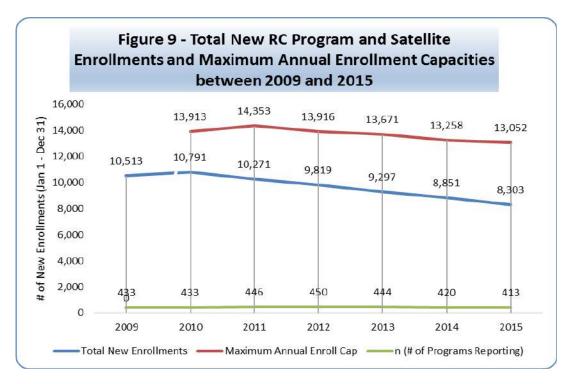


State (# of programs reporting)	Degree	2015 Applications (N=398)	2014 Applications (N=411)	2013 Applications (N=444)	2012 Applications (N=450)	2011 Applications (N=446)	2010 Applications (N=433)
WI (n=6)	Total	255	296	330	352	442	443
6	Associate	255	296	330	352	442	443
0	Baccalaureate	0	0	0	0	0	0
WV (n=4)	Total	119	268	184	306	209	324
2	Associate	98	250	157	286	172	289
2	Baccalaureate	21	18	27	20	39	35
WY (n=1)	Total	16	10	15	20	20	14
			10	45	00	00	
1	Associate	16	10	15	20	20	14



#### **Total New Enrollments**

*Programmatic enrollment* is deemed by the CoARC to occur when a student enrolls in the first core respiratory care course; i.e. a non-survey/non-prerequisite course available only to students matriculated in the respiratory care program. This may be different than the enrollment or matriculation date determined by the institution. This definition is used for calculating programmatic attrition, on-time graduation rates, and maximum annual enrollment. **Figure 9** shows total new enrollments from 2009 through 2015. Enrollments for 2010 through 2015 are compared to the total maximum annual enrollment capacity<sup>1</sup>. The CoARC did not track maximum annual enrollment capacity prior to 2010. The data show new enrollments reaching 63.6% of capacity in 2015, 66.8% of capacity in 2014, 68.0% of capacity in 2013, 70.5% of capacity in 2012, 72% of capacity in 2011, and 78% of capacity in 2012, and 32 in 2011 and 2010. The mean number of new enrollments per program was 20 in 2015, 21 in 2014 and 2013, 22 in 2012, 23 in 2011, 24 in 2010, and 24 zin 2009. The median number of new enrollments per program was 18 in 2015, 25 in 2014, 18 in 2013, 19 in 2012 and 2011, 20 in 2010, and 19 in 2009. There was a 6.2% decrease in new enrollments in 2015 compared to 2014 and a 21% decrease compared to 2009. Twenty-three programs did not report enrollment data in 2015 for the 2016 RCS.



Not included in **Figure 9** are the enrollment data for the 7 sleep specialist program options. There were 42 new enrollments in 2015 which is a 13.5% increase compared to 2014. In 2015, new enrollments reached 47% of maximum capacity. The mean number of new enrollments per program option was 8 in 2015, 7 in 2014, 6 in 2013, 7 in 2012 and 2011, 5 in 2010, and 8 in 2009. The median number of new enrollments per program option was 6 in 2015, 5 in 2014, 4 in 2013, 5 in 2012, 3 in 2011, 3 in 2010, and 5 in 2009.

<sup>&</sup>lt;sup>1</sup> The maximum annual enrollment capacity is defined as the maximum number of new students that could be enrolled in a calendar year (defined as January 1 through December 31). This number is established by the CoARC based on information provided by the program, and can only be increased upon approval of a request for a substantive change (see CoARC Policy 9.10).



Table 13 – Ne	Table 13 – New RC Enrollments by Degree Offered between 2011 and 2015														
Degree Offered	2015 Max Annual Enrollment Capacity		2015 New Enrollments (N=413)		2014 New Enrollments (N=420)		2013 New Enrollments (N=444)		2012 New Enrollments (N=450)		2011 New Enrollments (N=446) *				
	Total Mean														
Associate	11,567	33	7,289	21	7,852	22	8,273	22	8,872	23	9,290	24			
Associate & Baccalaureate											51	17			
Baccalaureate	1,381	23	948	16	948	17	993	16	920	16	852	17			
Baccalaureate & Masters											78	26			
Masters	104	35	66	22	51	17	31	10	27	9					

#### New RC Enrollments by Degree Offered

**Table 13** shows the new annual enrollments in respiratory care in relation to the degree offered. The 351 programs offering associate degrees accounted for 87.8% of the 8,303 new enrollments in 2015. This is a 7.2% decrease compared to 2014 for this category and a 21.5% decrease compared to 2011. New enrollments in associate degree programs reached 63% of maximum capacity in 2015. The mean number of new enrollments per program for this category was 21 in 2015, 22 in 2014 and 2013, 23 in 2012, and 24 in 2011. The median number of new enrollments per program for this category was 21 in 2015, 32 in 2014 and 2013, 23 in 2012, and 24 in 2013, and 19 in 2012 and 2011.

The 59 programs offering baccalaureate degrees accounted for 11.4% of the total number of new enrollments in 2015. There is no change compared to 2014 for this category, but an 11.3% increase compared to 2011. New baccalaureate degree enrollments reached 68.6% of maximum capacity in 2015. The mean number of new enrollments per program for this category was 16 in 2015, 17 in 2014, 16 in 2013, 16 in 2012, and 17 in 2011. The median number of new enrollments per program for this category was 15 in 2015 and 2014, and 18 in 2013, 2012, and 2011.

The 3 programs offering master's degrees accounted for 0.8% of the total number of new enrollments in 2015. This is a 29.4% increase compared to 2014. New enrollments in these programs reached 63.5% of maximum capacity in 2015. The mean number of new enrollments per program for this category was 22 in 2015, 17 in 2014, 10 in 2013 and 9 in 2012. The median number of new enrollments per program for this category was 13 in 2015, 18 in 2014, 10 in 2013 and 6 in 2012.

\*<u>Note</u>: Data from the programs that offered more than one degree type (i.e., Associate and Baccalaureate or Baccalaureate and Masters) were separated in 2013 and a different CoARC number was assigned for each degree offered. These programs no longer report combined data as was the case in the 2012 and 2011 Reports on Accreditation.



Table14 – New RC E	inrollme	nts by Ir	nstitutio	nal Type	betwee	en 2011	and 201	5				
Institutional Type		Max   Enroll acity	Enrol	New Iments 413)	2014 New Enrollments (N=420)		2013 New Enrollments (N=444)		2012 New Enrollments (N=450)		2011 New Enrollments (N=446)	
	Total	Mean	Total	Mean	Total	Mean	Total	Mean	Total	Mean	Total	Mean
Community or Junior College	6,409	27	4,522	19	4,769	20	4,953	20	5,176	20	5,337	21
Four-Year College or University	2,849	30	1,846	19	1,888	21	1,995	20	1,861	19	1,912	20
Technical or Vocational School	2,987	48	1,425	23	1,797	26	1,923	27	2,303	30	2,517	33
Academic HSC/ Medical Center	221	20	134	12	148	13	151	13	184	15	198	17
Career or Technical College	358	45	210	26	91	18	116	19	144	21	181	20
U.S. Military	228	114	166	83	158	79	159	80	151	76	126	63

#### New RC Enrollments by Institutional Type

**Table 14** shows the new enrollments in respiratory care programs in relation to institutional type for the years 2011-2015. The 235 programs offered in community or junior colleges is the largest category and accounted for 54.5% of the 8,303 new enrollments in 2015. This is a 4.4% decrease in enrollments compared to 2014 and a 15.3% decrease compared to 2011. New enrollments reached 70.6% of maximum capacity in 2015. The mean number of new enrollments per program was 19 in 2015, 20 in 2014, 2013, and 2012, and 21 in 2011. The median was 18 in 2015 and 2014 and 2013, 20 in 2012, and 19 in 2011.

The 95 programs offered in four-year colleges or universities accounted for 22.2% of the total number of new enrollments in 2015. This is a 2.2% decrease compared to 2014 and a 3.5% decrease compared to 2011. New enrollments reached 64.8% of maximum capacity in 2015. The mean number of new enrollments per program was 19 in 2015, 21 in 2014, 20 in 2013, 19 in 2012, and 20 in 2011. The median was 15 in 2015, 16 in 2014 and 2013, 17 in 2012, and 16 in 2011.

The 62 programs offered in technical or vocational schools accounted for 17.2% of the total number of new enrollments in 2015. This is a 20.7% decrease compared to 2014 and a 43.4% decrease compared to 2011. New enrollments reached 47.7% of maximum capacity in 2015. The mean number of new enrollments per program was 23 in 2015, 26 in 2014, 27 in 2013, 30 in 2012, and 33 in 2011. The median was 20 in 2015, 19 in 2014, 20 in 2013, 23 in 2012, and 22 in 2011.

The 11 programs offered in academic HSC/medical centers accounted for 1.6% of the total number of new enrollments in 2015. This is a 9.5% decrease compared to 2014 and a 32.3% decrease compared to 2011. New enrollments reached 60.6% of maximum capacity in 2015. The mean number of new enrollments per program was 12 in 2015, 13 in 2014 and 2013, 15 in 2012, and 17 in 2011. The median was 12 in 2015, 14 in 2014, 10 in 2013, and 16 in 2012 and 2011.

The 8 programs offered in career or technical colleges accounted for 2.5% of the total number of new enrollments in 2015. This is a 130.8% increase compared to 2014 and a 16.0% increase compared to 2011. New enrollments reached 58.7% of maximum capacity in 2015. The mean number of new enrollments per program was 26 in 2015, 18 in 2014, 19 in 2013, 21 in 2012, and 20 in 2011. The median was 16 in 2015, 20 in 2014, 18 in 2013 and 2012, and 20 in 2011.

The 2 programs offered in the U.S. military accounted for 2.0% of the total number of new enrollments in 2015. This is a 5.1% increase compared to 2014, and a 31.7% increase compared to 2011. New enrollments reached 72.8% of maximum capacity in 2015. The mean (and median) number of new enrollments per program was 83 in 2015, 79 in 2014, 80 in 2013, 76 in 2012, and 63 in 2011.



Table 15 – New F	Table 15 – New RC Enrollments by Institutional Control/Funding between 2011 and 2015													
Institutional Control/Funding	2015 Annual Capa	Enroll	2015 New Enrollments (N=413)		2014 New Enrollments (N=420)		2013 New Enrollments (N=444)		2012 New Enrollments (N=450)		2011 New Enrollments (N=446)			
	Total	Mean	Total	Mean	Total	Mean	Total	Mean	Total	Mean	Total	Mean		
Public/Not-For- Profit	8,284	25	5,924	18	6,150	18	6,497	18	6,631	19	6,767	19		
Private/For-Profit (Proprietary)	3,127	63	1,467	29	1,984	37	2,081	37	2,070	36	2,833	46		
Private/Not-For- Profit	1,413	39	746	21	559	18	560	17	967	20	545	17		
Federal Government	228	114	166	83	158	79	159	80	151	76	126	63		

#### New RC Enrollments by Institutional Control/Funding

**Table 15** shows the new enrollments in respiratory care programs in relation to institutional control/funding for the years 2011-2015. The 325 programs controlled/funded by public/not-for-profit institutions is the largest category and accounted for 71.3% of the 8,303 new respiratory care enrollments in 2015. This is a 3.7% decrease compared to 2014 and a 12.5% decrease compared to 2011. New enrollments were at 71.5% of maximum capacity in 2015 for programs in this category. The mean number of new enrollments per program was 18 in 2015, 18 in 2014 and 2013, and 19 in 2012 and 2011. The median was 17 in 2015, 18 in 2014 and 2013, and 19 in 2012 and 2011.

The 50 programs controlled /funded by private/for-profit (proprietary) institutions accounted for 17.7% of the total number of new enrollments in 2015. This is a 26.1% decrease compared to 2014 and a 48.2% decrease compared to 2011. New enrollments reached 46.9% of maximum capacity in 2015 for programs in this category. The mean number of new enrollments per program was 29 in 2015, 37 in 2014 and 2013, 36 in 2012, and 46 in 2011. The median was 27 in 2015, 33 in 2014, 31 in 2013, 29 in 2012, and 33 in 2011.

The 36 programs controlled/funded by private/not-for-profit institutions accounted for 9.0% of the total number of new enrollments in 2015. This is a 33.5% increase compared to 2014, and a 36.9% increase compared to 2011. New enrollments reached 52.8% of maximum capacity in 2015 for programs in this category. The mean number of new enrollments per program was 21 in 2015, 18 in 2014, 17 in 2013, 20 in 2012, and 17 in 2011. The median was 11 in 2015, 15 in 2014, 14 in 2013, 17 in 2012, and 14 in 2011.

The 2 programs controlled/funded by the federal government accounted for 2.0% of the total number of new enrollments in 2015. This is a 5.1% increase compared to 2014, and a 31.7% increase compared to 2011. New enrollments reached 72.8% of maximum capacity in 2015. The mean (and median) number of new enrollments per program was 83 in 2015, 79 in 2014, 80 in 2013, 76 in 2012, and 63 in 2011.



#### New RC Enrollments by State (including D.C.) and Degree

**Table 16** provides data on new enrollments in respiratory care programs for 2010-2015 by state and degree offered. As expected, California had the largest (14.2% of total) enrollments of any state in 2015.

Table 16 – New RC Enrollments by State (including D.C.) and Degree between 2010 and 2015											
State (# of programs reporting)	Degree	2015 Maximum Annual Enroll Capacity	2015 New Enrollments (N=413)	2014 New Enrollments (N=420)	2013 New Enrollments (N=444)	2012 New Enrollments (N=450)	2011 New Enrollments (N=446)	2010 New Enrollments (N=433)			
AL (n=5)	Total	181	134	143	147	151	145	142			
4	Associate	155	108	122	100	82	85	80			
1	Baccalaureate	26	26	21	47	69	60	62			
AR (n=8)	Total	160	90	117	134	133	104	118			
7	Associate	136	74	100	118	109	76	88			
1	Baccalaureate	24	16	17	16	24	28	30			
AZ (n=5)	Total	353	194	229	189	208	337	418			
5	Associate	353	194	229	189	208	337	418			
0	Baccalaureate	0	0	0	0	0	0	0			
CA (n=38)	Total	2,152	1,180	1,429	1,497	1,751	1,861	1,744			
37	Associate	2,130	1,174	1,420	1,488	1,731	1,853	1,725			
1	Baccalaureate	22	6	9	9	20	8	19			
CO (n=4)	Total	227	97	105	99	119	108	137			
4	Associate	227	97	105	99	119	108	137			
0	Baccalaureate	0	0	0	0	0	0	0			
CT (n=5)	Total	118	85	90	76	92	86	104			
4	Associate	100	67	76	59	73	69	88			
1	Baccalaureate	18	18	14	17	18	17	16			
DC (n=1)	Total	24	4	7	24	18	14	17			
1	Associate	24	4	7	10	18	14	17			
0	Baccalaureate	0	0	0	0	0	0	0			
DE (n=2)	Total	35	25	25	24	34	35	28			
2	Associate	35	25	25	24	34	35	28			
0	Baccalaureate	0	0	0	0	0	0	0			
FL (n=24)	Total	722	486	482	526	497	669	695			
22	Associate	667	449	454	498	476	639	665			
2	Baccalaureate	55	37	28	28	21	30	30			
GA (n=15)	Total	392	260	276	260	270	272	292			
11	Associate	245	177	179	167	189	184	208			
3	Baccalaureate	97	78	86	83	75	44	43			
1	Masters	50	5	11	10	6	0	0			
HI (n=1)	Total	16	16	17	16	12	16	17			
1	Associate	16	16	17	16	12	16	17			
0	Baccalaureate	0	0	0	0	0	0	0			

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State (# of programs reporting)	Degree	2015 Maximum Annual Enroll Capacity	2015 New Enrollments (N=413)	2014 New Enrollments (N=420)	2013 New Enrollments (N=444)	2012 New Enrollments (N=450)	2011 New Enrollments (N=446)	2010 New Enrollments (N=433)
IA (n=6)	Total	123	80	84	87	97	96	111
6	Associate	123	80	84	87	97	96	111
0	Baccalaureate	0	0	0	0	0	0	0
ID (n=3)	Total	80	43	45	50	56	43	74
2	Associate	55	21	23	28	32	43	74
1	Baccalaureate	25	22	22	22	24	0	0
IL (n=15)	Total	423	248	263	279	288	303	317
13	Associate	375	232	238	255	262	278	293
1	Baccalaureate	24	3	3	5	5	25	24
1	Masters	24	13	22	19	21	278	293
IN (n=11)	Total	235	200	207	211	206	222	232
9	Associate	189	155	177	181	176	193	202
2	Baccalaureate	46	45	30	30	30	29	30
KS (n=9)	Total	192	104	122	132	139	130	142
8	Associate	168	98	101	123	121	116	124
1	Baccalaureate	24	6	21	9	18	14	18
KY (n=12)	Total	241	175	164	207	236	230	220
10	Associate	206	150	131	192	216	216	205
2	Baccalaureate	35	25	33	15	20	14	15
LA (n=9)	Total	183	112	106	122	129	138	150
6	Associate	116	78	87	106	109	106	129
3	Baccalaureate	67	34	19	16	20	32	21
MA (n=5)	Total	110	91	110	113	107	101	125
5	Associate	110	91	110	113	107	101	125
.0	Baccalaureate	0	0	0	0	0	0	0
MD (n=6)	Total	153	122	146	145	156	156	157
5	Associate	113	88	107	105	120	123	133
1	Baccalaureate	40	34	39	40	36	33	24
ME (n=2)	Total	34	32	30	33	31	32	37
2	Associate	34	32	30	33	31	32	37
0	Baccalaureate	0	0	0	0	0	0	0
MI (n=11)	Total	319	271	233	299	269	292	379
11	Associate	319	271	233	299	269	292	379
0	Baccalaureate	0	0	0	0	0	0	0
MN (n=5)	Total	123	87	101	90	97	100	99
3	Associate	83	64	68	57	68	74	75
2	Baccalaureate	40	23	33	33	29	26	24



State (# of programs reporting)	Degree	2015 Maximum Annual Enroll Capacity	2015 New Enrollments (N=413)	2014 New Enrollments (N=420)	2013 New Enrollments (N=444)	2012 New Enrollments (N=450)	2011 New Enrollments (N=446)	2010 New Enrollments (N=433)
MO (n=9)	Total	287	141	160	160	189	208	241
7	Associate	263	120	145	149	175	193	228
2	Baccalaureate	24	21	15	11	14	15	13
MS (n=8)	Total	162	126	112	118	119	133	135
8	Associate	162	126	112	118	119	133	135
0	Baccalaureate	0	0	0	0	0	0	0
MT (n=2)	Total	38	17	22	25	27	21	28
2	Associate	38	17	22	25	27	21	28
0	Baccalaureate	0	0	0	0	0	0	0
NC (n=14)	Total	300	217	239	230	234	240	260
14	Associate	300	217	239	230	234	240	260
0	Baccalaureate	0	0	0	0	0	0	0
ND (n=2)	Total	24	20	18	23	23	19	16
0	Associate	0	0	0	0	0	0	0
2	Baccalaureate	24	20	18	21	23	10	12
0	Masters	0	0	0	2	0	0	0
NE (n=4)	Total	98	51	71	63	79	79	60
3	Associate	83	46	63	56	72	70	54
1	Baccalaureate	15	5	8	7	7	9	6
NH (n=1)	Total	16	10	16	10	5	12	11
1	Associate	16	10	16	10	5	12	11
0	Baccalaureate	0	0	0	0	0	0	0
NJ (n=7)	Total	274	124	119	136	142	133	152
5	Associate	202	112	108	119	129	107	125
2	Baccalaureate	72	12	11	17	13	26	27
NM (n=6)	Total	179	112	83	112	109	87	112
6	Associate	179	112	83	112	109	87	112
0	Baccalaureate	0	0	0	0	0	0	0
NV (n=3)	Total	187	89	94	104	105	143	168
3	Associate	187	89	94	104	105	143	168
0	Baccalaureate	0	0	0	0	0	0	0
NY (n=13)	Total	460	327	373	351	355	339	362
10	Associate	386	266	310	286	286	285	289
3	Baccalaureate	74	61	63	65	69	54	73
OH (n=21)	Total	559	348	388	435	473	488	510
17	Associate	467	273	295	358	386	399	423
4	Baccalaureate	92	75	93	77	87	89	87



State (# of programs reporting)	Degree	2015 Maximum Annual Enroll Capacity	2015 New Enrollments (N=413)	2014 New Enrollments (N=420)	2013 New Enrollments (N=444)	2012 New Enrollments (N=450)	2011 New Enrollments (N=446)	2010 New Enrollments (N=433)
OK (n=5)	Total	101	71	102	98	110	107	121
5	Associate	101	71	102	98	110	107	121
0	Baccalaureate	0	0	0	0	0	0	0
OR (n=4)	Total	119	98	80	87	124	98	102
3	Associate	94	76	59	69	104	84	87
1	Baccalaureate	25	22	21	18	20	14	15
PA (n=24)	Total	669	371	434	423	404	459	483
18	Associate	551	289	347	328	325	374	403
6	Baccalaureate	118	82	87	95	79	25	17
RI (n=2)	Total	64	53	55	54	57	15	21
2	Associate	64	53	55	54	57	15	21
0	Baccalaureate	0	0	0	0	0	0	0
SC (n=7)	Total	161	114	108	128	133	140	132
7	Associate	161	114	108	128	133	140	132
0	Baccalaureate	0	0	0	0	0	0	0
SD (n=2)	Total	24	22	20	23	23	24	20
2	Associate	24	22	20	23	23	24	20
0	Baccalaureate	0	0	0	0	0	0	0
TN (n=10)	Total	327	204	212	214	242	233	245
7	Associate	268	147	156	158	192	176	194
3	Baccalaureate	59	57	56	56	50	57	51
TX (n=35)	Total	1,225	838	843	924	853	773	838
30	Associate	1,082	684	732	799	780	664	717
4	Baccalaureate	113	106	93	125	73	109	121
1	Masters	30	48	18	0	0	0	0
UT (n=5)	Total	494	304	284	323	368	396	333
2	Associate	408	259	251	274	340	351	281
3	Baccalaureate	86	45	33	49	28	45	52
VA (n=8)	Total	233	170	164	173	158	234	231
5	Associate	155	136	121	131	125	206	205
3	Baccalaureate	78	34	43	42	33	28	26
VT (n=1)	Total	27	15	17	9	19	18	20
1	Associate	27	15	17	9	19	18	20
0	Baccalaureate	0	0	0	0	0	0	0
WA (n=5)	Total	152	120	93	117	123	121	132
4	Associate	124	101	78	90	123	121	132
1	Baccalaureate	28	19	15	27	0	0	0



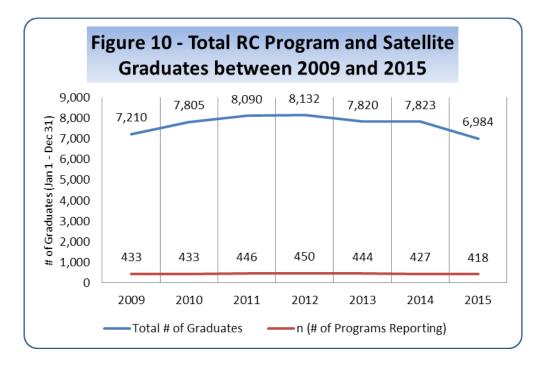
State (# of programs reporting)	Degree	2015 Maximum Annual Enroll Capacity	2015 New Enrollments (N=413)	2014 New Enrollments (N=420)	2013 New Enrollments (N=444)	2012 New Enrollments (N=450)	2011 New Enrollments (N=446)	2010 New Enrollments (N=433)
WI (n=7)	Total	155	142	136	128	133	153	146
7	Associate	155	142	136	128	133	153	146
0	Baccalaureate	0	0	0	0	0	0	0
WV (n=4)	Total	77	49	66	72	108	85	114
2	Associate	47	33	49	59	93	66	104
2	Baccalaureate	30	16	17	13	15	19	10
WY (n=1)	Total	15	15	11	11	12	15	13
1	Associate	15	15	11	11	12	15	13
0	Baccalaureate	0	0	0	0	0	0	0



#### **Total Graduates**

**Figure 10** provides the total number of graduates during the time period reported (i.e., January 1, 2009 through December 31, 2015). Graduation numbers includes both students that graduated on-time and students graduating after their expected graduation date.

There were 6,984 graduates in 2015. This is a 10.7% decrease compared to 2014. The mean number of graduates per program was 17 in 2015, 18 in 2014 and 2013 through 2010, and 16 in 2009. The median number of graduates per program was 14 in 2015, 15 in 2014, 14 in 2013, 15 in 2012, 14 in 2011, 13 in 2010, and 14 in 2009. Twenty programs had no 2015 graduate data to report for the 2016 RCS.



Not included in **Figure 10** are the graduate data for 6 sleep specialist program options (one program option had no 2015 graduate data to report for the 2016 RCS). There were a total of 39 graduates in 2015. This is a 2.6% increase compared to 2014. The mean number of graduates per program option was 7 in 2015, 8 in 2014, 6 in 2013, 5 in 2012, and 6 in 2011, 2010, and 2009. The median number of graduates was 4 in 2015, 5 in 2014 and 2013, 3 in 2012, 5 in 2011, 3 in 2010, and 4 in 2009.



Table 17 – RC Gra	Table 17 – RC Graduates by Degree Offered between 2011 and 2015													
Degree Offered	Grad	2015 Graduates (N=418)		2014 Graduates (N=427)		2013 Graduates (N=444)		12 uates 450)	2011 Graduates (N=446)*					
	Total         Mean         Total         Mean         Total         Mean         Total         Mean													
Associate	6,123	17	6,912	19	7,017	18	7,289	19	7,362	19				
Associate & Baccalaureate									30	10				
Baccalaureate	818	14	866	15	801	13	843	14	647	13				
Baccalaureate & Masters		•							51	17				
Masters	43	11	45	5	2	N/A	N/A	N/A						

#### RC Graduates by Degree Offered

**Table 17** shows the number of respiratory care graduates in relation to the degree offered. There were 6,984 graduates in 2015. The 355 programs offering associate degrees is the largest category and accounted for 87.7% of the total number of graduates in 2015. This is an 11.4% decrease compared to 2014, and is the lowest number for this category since 2009. The mean number of graduates per program for this category was 17 in 2015, 19 in 2014, 18 in 2013, and 19 in 2012 and 2011. The median number of graduates per program for this category was 14 in 2015, 15 in 2014, 14 in 2013, 15 in 2012, and 14 in 2011.

The 59 programs offering baccalaureate degrees accounted for 11.7% of the total number of graduates in 2015. This is a 5.5% decrease compared to 2014, but a 26.4% increase in graduates for this category compared to 2011. The mean number of graduates per program for this category was 14 in 2015, 15 in 2014, 13 in 2013, 14 in 2012, and 13 in 2011. The median number of graduates per program for this category was 14 in 2015, 15 in 2014, 14 in 2013, and 15 in 2012, and 11 in 2011.

The 4 programs offering master's degrees accounted for 0.6% of the total number of graduates in 2015. This is a 4.4% decrease compared to 2014. The mean number of graduates per program for this category was 11 in 2015 and 15 in 2014. The median number of graduates per program for this category was 11 in 2015.

\*<u>Note</u>: Data from programs that offered more than one degree type (i.e., Associate and Baccalaureate or Baccalaureate and Masters) were separated in 2013 and a different CoARC number was assigned for each degree offered. These programs no longer report combined data as was the case in the 2012 and 2011 Reports on Accreditation.



#### RC Graduates by Institutional Type

Table 18 –RC Graduates by Institutional Type between 2011 and 2015											
Institutional Type	Grad	15 uates 418)	lates Gradua		2013 Graduates (N=444)			12 uates 450)	s Graduate (N=446)		
	Total	Mean	Total	Mean	Total	Mean	Total	Mean	Total	Mean	
Community or Junior College	3,701	15	3,944	16	3,953	16	4,151	16	4,088	16	
Four-Year College or University	1,487	16	1,802	19	1,743	17	1,579	16	1,476	16	
Technical or Vocational School	1,338	22	1,699	24	1,746	24	2,003	26	2,173	29	
Academic HSC/Medical Center	116	10	184	14	134	11	152	13	111	9	
Career or Technical College	192	<b>192</b> 21 <sup>•</sup>		20	115	19	151	22	179	20	
U.S. Military 150		75	93	47	129	65	96	48	63	32	

**Table 18** shows the number of respiratory care graduates in relation to institutional type. The 239 programs offered in community or junior colleges is the largest category and accounted for 53% of the total number of respiratory care graduates in 2015. This is a 6.2% decrease compared to 2014 and a 9.5% decrease compared to 2011. The mean number of graduates per program for this category was 15 in 2015, 16 in 2014 through 2011. The median was 14 in 2015, 15 in 2014 and 2013, 14 in 2012, and 12 in 2011.

The 95 programs offered in four-year colleges or universities accounted for 21.3% of the total number of graduates in 2015. This is a 17.5% decrease compared to 2014, but a 0.7% increase compared to 2011. The mean number of graduates per program was 16 in 2015, 19 in 2014, 17 in 2013, and 16 in 2012 and 2011. The median was 14 in 2015 and 2014 and 2013, 13 in 2012, and 11 in 2011.

The 61 programs offered in technical or vocational schools accounted for 19.2% of the total number of graduates in 2015. This is a 21.2% decrease compared to 2014 and a 38.4% decrease compared to 2011. The mean number of graduates per program was 22 in 2015, 24 in 2014 and 2013, 26 in 2012, and 29 in 2011. The median was 18 in 2015, 16 in 2014, 17 in 2013 and 2012, and 19 in 2011.

The 12 programs offered in academic HSC/Medical Centers accounted for 1.7% of the total number of graduates in 2015. This is a 37% decrease compared to 2014, but a 4.5% increase compared to 2011. The mean number of graduates per program was 10 in 2015, 14 in 2014, 11 in 2013, 13 in 2012, and 9 in 2011. The median was 9 in 2015, 15 in 2014, 12 in 2013 and 2012, and 8 in 2011.

The 9 programs offered in career or technical colleges accounted for 2.7% of the total number of graduates in 2015. This is a 90.2% increase compared to 2014 and a 7.3% increase compared to 2011. The mean number of graduates per program was 21 in 2015, 20 in 2014, 19 in 2013, 22 in 2012, and 20 in 2011. The median was 15 in 2015, 14 in 2014, 13 in 2013 and 2012, and 12 in 2011.

The 2 programs offered in the U.S. military accounted for 2.1% of the total number of graduates in 2015. This is a 61.3% increase compared to 2014 and a 138% increase compared to 2011. The mean/ median number of graduates per program was 75 in 2015, 47 in 2014, 65 in 2013, 48 in 2012, and 32 in 2011.



#### **RC Graduates by Institutional Control/Funding**

Table 19 –RC Gradu	Table 19 – RC Graduates by Institutional Control/Funding between 2011 and 2015													
Institutional Control/Funding		aduates 418)		2014 Graduates (N=427)		raduates :444)	2012 Graduates (N=450)		2011 Graduate (N=446)					
5	Total	Mean	Total	Mean	Total	Mean	Total	Mean	Total	Mean				
Public/Not-For-Profit	4,814	14	5,223	15	5,223	15	5,440	15	5,300	15				
Private/For-Profit (Proprietary)	1,436	29	2,001	37	1,968	35	1,796	32	2,370	38				
Private/Not-For-Profit	584	17	506	16	500	15	800	21	357	11				
Federal Government	150	75	93	47	129	65	96	48	63	32				

# **Table 19** shows the number respiratory care graduates in relation to institutional control/funding. The 333 programs controlled/ funded by public/not-for-profit institutions is the largest category and accounted for 68.9% of the total number of respiratory care graduates in 2015. This is a 7.8% decrease compared to 2014 and a 9.2% decrease compared to 2011. The mean number of graduates per program was 14 in 2015, 15 in 2014 through 2011. The median was 14 in 2015 and 2014 and 2013, and 10 in 2012 and 2011.

The 49 programs controlled/funded by private/for-profit (proprietary) institutions accounted for 20.6% of the total number of respiratory care graduates in 2015. This is a 28.2% decrease compared to 2014 and a 39.4% decrease compared to 2011. The mean number of graduates per program was 29 in 2015, 37 in 2014, 35 in 2013, 32 in 2012, and 38 in 2011. The median was 29 in 2015, 27 in 2014, 25 in 2013, 26 in 2012, and 30 in 2011.

The 34 programs controlled/funded by private/not-for-profit institutions accounted for 8.4% of the total number of respiratory care graduates in 2015. This is a 15.4% increase compared to 2014 and a 63.6% increase compared to 2011. The mean number of graduates per program was 17 in 2015, 16 in 2014, 15 in 2013, 21 in 2012 and 11 in 2011. The median was 12 in 2015, 13 in 2014, 12 in 2013 and 2012, and 9 in 2011.

The 2 programs offered in the U.S. military accounted for 2.1% of the total number of graduates in 2015. This is a 61.3% increase compared to 2014 and a 138% increase compared to 2011. The mean/ median number of graduates per program was 75 in 2015, 47 in 2014, 65 in 2013, 48 in 2012, and 32 in 2011.



#### RC Graduates by State (including D.C.) and Degree

**Table 20** provides data on respiratory care graduates for 2010-2015 by state and degree offered. As expected, California graduated the largest number of graduates (16.3% of total) in 2015.

Table 20 –RC	Graduates by St	ate (including	g D.C.) and I	Degree betw	een 2010 an	d 2015	
State (# of programs reporting)	Degree	2015 Graduates (N=418)	2014 Graduates (N=427)	2013 Graduates (N=444)	2012 Graduates (N=450)	2011 Graduates (N=446)	2010 Graduates (N=433)
AL (n=5)	Total	97	107	129	104	129	124
4	Associate	74	53	87	59	80	79
1	Baccalaureate	23	54	42	45	49	45
AR (n=10)	Total	83	113	89	98	88	62
7	Associate	71	93	77	75	66	48
3	Baccalaureate	12	20	12	23	22	14
AZ (n=6)	Total	156	201	199	298	338	340
6	Associate	156	201	199	298	338	340
0	Baccalaureate	0	0	0	0	0	0
CA (n=38)	Total	1,138	1,424	1,395	1,476	1,284	1,277
37	Associate	1,129	1,405	1,382	1,463	1,277	1,269
1	Baccalaureate	9	19	13	13	7	8
CO (n=4)	Total	89	92	81	110	108	116
4	Associate	89	92	81	110	108	116
0	Baccalaureate	0	0	0	0	0	0
CT (n=5)	Total	50	70	79	81	64	64
4	Associate	40	56	68	66	53	50
1	Baccalaureate	10	14	11	15	11	14
DC (n=1)	Total	8	12	5	8	8	11
1	Associate	8	12	5	8	8	11
0	Baccalaureate	0	0	0	0	0	0
DE (n=2)	Total	17	23	23	27	26	25
2	Associate	17	23	23	27	26	25
0	Baccalaureate	0	0	0	0	0	0
FL (n=24)	Total	434	421	421	460	668	484
23	Associate	409	400	400	435	660	473
1	Baccalaureate	25	21	21	25	8	11
GA (n=15)	Total	231	228	213	231	237	238
11	Associate	159	153	143	159	176	166
3	Baccalaureate	67	71	70	72	27	37
1	Masters	5	4	N/A	0	34	35
HI (n=1)	Total	13	11	13	15	12	11
	Associate	13	11	13	15	12	11
0	Baccalaureate	0	0	0	0	0	0

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State (# of programs reporting)	Degree	2015 Graduates (N=418)	2014 Graduates (N=427)	2013 Graduates (N=444)	2012 Graduates (N=450)	2011 Graduates (N=446)	2010 Graduates (N=433)
IA (n=6)	Total	67	68	69	79	73	66
6	Associate	67	68	69	79	73	66
0	Baccalaureate	0	0	0	0	0	0
ID (n=3)	Total	29	50	35	58	59	32
1	Associate	6	34	19	36	59	32
2	Baccalaureate	23	16	16	22	0	0
IL (n=14)	Total	217	252	230	248	227	245
12	Associate	197	226	209	227	219	245
1	Baccalaureate	4	2	21	21	8	0
1	Masters	16	24	N/A	0	8	0
IN (n=11)	Total	164	176	175	171	184	174
9	Associate	122	153	152	150	158	146
2	Baccalaureate	42	23	23	21	26	28
KS (n=9)	Total	100	105	118	109	92	83
8	Associate	92	87	102	95	85	73
1	Baccalaureate	8	18	16	14	7	10
KY (n=13)	Total	165	147	179	174	139	160
11	Associate	140	118	167	163	127	146
2	Baccalaureate	25	29	12	11	12	14
LA (n=9)	Total	96	103	95	113	112	87
6	Associate	74	83	77	98	101	71
3	Baccalaureate	22	20	18	15	11	16
MA (n=5)	Total	69	73	84	102	88	105
5	Associate	69	73	84	102	88	105
0	Baccalaureate	0	0	0	0	0	0
MD (n=7)	Total	121	128	122	122	127	109
6	Associate	85	90	91	100	91	86
1	Baccalaureate	36	38	31	22	36	23
ME (n=2)	Total	26	22	21	26	24	24
2	Associate	26	22	21	26	24	24
0	Baccalaureate	0	0	0	0	0	0
MI (n=11)	Total	184	202	204	244	273	278
11	Associate	184	202	204	244	273	278
0	Baccalaureate	0	0	0	0	0	0
MN (n=5)	Total	64	75	77	79	57	65
3	Associate	38	50	52	57	43	46
2	Baccalaureate	26	25	25	22	14	19
MO (n=11)	Total	129	121	156	154	173	173
9	Associate	118	110	146	143	159	161
2	Baccalaureate	11	11	10	11	14	12

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State (# of programs reporting)	Degree	2015 Graduates (N=418)	2014 Graduates (N=427)	2013 Graduates (N=444)	2012 Graduates (N=450)	2011 Graduates (N=446)	2010 Graduates (N=433)
MS (n=8)	Total	81	104	106	96	88	95
8	Associate	81	104	106	96	88	95
0	Baccalaureate	0	0	0	0	0	0
MT (n=2)	Total	16	21	18	18	25	18
2	Associate	16	21	18	18	25	18
0	Baccalaureate	0	0	0	0	0	0
NC (n=14)	Total	158	179	162	184	176	182
14	Associate	158	179	162	184	176	182
0	Baccalaureate	0	0	0	0	0	0
ND (n=3)	Total	21	24	18	14	18	22
0	Associate	0	0	0	0	0	0
2	Baccalaureate	19	24	16	14	9	11
1	Masters	2	0	2	0	9	11
NE (n=4)	Total	51	48	58	66	46	57
3	Associate	48	43	53	58	40	52
1	Baccalaureate	3	5	5	8	6	5
NH (n=1)	Total	7	5	11	9	10	11
1	Associate	7	5	11	9	10	11
0	Baccalaureate	0	0	0	0	0	0
NJ (n=7)	Total	100	114	131	109	116	93
5	Associate	92	101	115	109	97	77
2	Baccalaureate	8	13	16	0	19	16
NM (n=5)	Total	86	64	111	77	87	73
5	Associate	86	64	111	77	87	73
0	Baccalaureate	0	0	0	0	0	0
NV (n=3)	Total	89	61	79	80	128	107
3	Associate	89	61	79	80	128	107
0	Baccalaureate	0	0	0	0	0	0
NY (n=13)	Total	243	256	231	284	247	244
10	Associate	187	192	180	217	192	183
3	Baccalaureate	56	64	51	67	55	61
OH (n=22)	Total	315	414	377	375	386	383
17	Associate	235	321	303	298	305	306
5	Baccalaureate	80	93	74	77	81	77
OK (n=7)	Total	87	104	108	88	99	104
7	Associate	87	104	108	88	99	104
0	Baccalaureate	0	0	0	0	0	0



State (# of programs	Degree	2015 Graduates	2014 Graduates	2013 Graduates	2012 Graduates	2011 Graduates	2010 Graduates
reporting)		(N=418)	(N=427)	(N=444)	(N=450)	(N=446)	(N=433)
OR (n=4)	Total	85	103	83	85	92	64
3	Associate	71	90	69	74	92	49
1	Baccalaureate	14	13	14	11	0	15
PA (n=21)	Total	321	310	316	343	292	293
17	Associate	258	251	259	292	235	233
4	Baccalaureate	63	59	57	51	46	43
RI (n=2)	Total	43	37	32	15	24	15
2	Associate	43	37	32	15	24	15
0	Baccalaureate	0	0	0	0	0	0
SC (n=7)	Total	87	81	78	85	92	77
7	Associate	87	81	78	85	92	77
0	Baccalaureate	0	0	0	0	0	0
SD (n=2)	Total	17	17	15	20	15	13
2	Associate	17	17	15	20	15	13
0	Baccalaureate	0	0	0	0	0	0
TN (n=10)	Total	163	180	186	187	174	134
7	Associate	115	135	134	139	131	93
3	Baccalaureate	48	45	52	48	43	41
TX (n=35)	Total	714	662	681	650	680	632
30	Associate	599	583	596	553	591	540
4	Baccalaureate	95	62	85	97	89	92
1	Masters	20	17	0	0	0	0
UT (n=5)	Total	185	403	383	287	241	331
2	Associate	154	356	357	244	224	268
3	Baccalaureate	31	47	26	43	17	63
VA (n=8)	Total	127	130	124	127	131	146
5	Associate	97	94	93	94	112	126
3	Baccalaureate	30	36	31	33	19	20
VT (n=1)	Total	6	13	14	14	10	14
1	Associate	6	13	14	14	10	14
0	Baccalaureate	0	0	0	0	0	0
WA (n=5)	Total	84	89	102	101	94	114
4	Associate	62	73	83	101	94	114
1	Baccalaureate	22	16	19	0	0	0
WI (n=7)	Total	103	97	106	109	116	109
7	Associate	103	97	106	109	116	109
0	Baccalaureate	0	0	0	0	0	0
WV (n=4)	Total	43	72	67	88	88	87
2	Associate	28	64	53	73	68	77
2	Baccalaureate	15	8	14	15	20	10
WY (n=1)	Total	5	11	11	7	7	7
1	Associate	5	11	11	7	7	7
0	Baccalaureate	0	0	0	0	0	0

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#### **Programmatic Attrition**

Programmatic attrition is defined by the CoARC as, "Students formally enrolled in a respiratory care program that began fundamental (non-survey) respiratory care core coursework and have left for academic or non-academic reasons." <sup>2</sup> Students who leave the program before the fifteenth calendar day from the beginning of the term when fundamental respiratory care core coursework commenced, and students transferring to program satellites, are not included in program attrition. Fundamental respiratory care core coursework is defined as 'professional coursework progressing toward completion of the respiratory care program'. Programmatic enrollment, as defined by the CoARC, begins when the respiratory student enrolls in the first core respiratory care course; i.e. a course available only to students matriculated in the respiratory care program. This date may be different than the enrollment or matriculation date determined by the institution. However, it is this date, as defined by the CoARC that must be used when calculating programmatic attrition, on-time graduation rates and maximum annual enrollment. Academic attrition is due to failure to attain grades or acquire other programmatic competencies (e.g. ethics, professionalism, behavioral), or for violation of an academic policy that results in a student's expulsion from the program. *Non-Academic* attrition is due to reasons other than those defined as academic -financial hardship, medical, family, deployment, changing course of study, relocation, etc..

Table 21 – RC Programmatic Attrition for 2011 RCS through 2016 RCS								
Reporting Years (# of programs submitting)	Mean (SD)	Maximum Value	Minimum Value	CoARC Threshold	# of Programs Above Threshold			
2011 RCS Data from 1/1/08 to 12/31/10 (N=426)	17.0% (10.7)	52.0%	0%	40%	13			
2012 RCS Data from 1/1/09 to 12/31/11 (N=434)	17.4% (10.7)	55.0%	0%	40%	8			
2013 RCS Data from 1/1/10 to 12/31/12 (N=442)	19.1% (10.9)	50.9%	0%	40%	14			
2014 RCS Data from 1/1/11 to 12/31/13 (N=436)	19.1% (11.4)	62.5%	0%	40%	12			
2015 RCS Data from 1/1/12 to 12/31/14 (N=437)	18.9% (10.9)	71.4%	0%	40%	9			
2016 RCS Data from 1/1/13 to 12/31/15 (N=)	18.5% (11.3)	75.0%	0%	40%	11			

2016 RCS data on programmatic attrition (**Table 21**) show a total of 438 programs reporting programmatic attrition rates. All programs had attrition data to report for the 2016 RCS. The mean attrition rate was 18.5% with the highest rate of 75.0% (n=1) and the lowest rate of 0% (n=23). The median attrition rate for the 2016 RCS was 17.1%. 11 programs (2.5% of total) reported attrition rates above the <u>CoARC</u>-

<sup>&</sup>lt;sup>2</sup> The attrition definition in use at the time of the submission of the 2011 RCS was as follows: *"Students formally enrolled in a respiratory care program that began fundamental (non-survey) respiratory care core coursework and have left for academic or non-academic reasons.* Students who leave the program with a full tuition refund, and those students transferring to satellites are not included in program attrition. Programmatic enrollment, as defined by CoARC, begins at the point at which the respiratory student enrolls in the first core respiratory care course (non-survey) that is available only to students matriculated in the respiratory care program."



<u>established threshold</u> of 40%. As per CoARC Standard 3.11, these programs began a dialogue with the CoARC to develop an appropriate plan of action (i.e., a <u>progress report</u>) for program improvement. When compared to the 2015 RCS data on programmatic attrition rates, the 2015 RCS data shows a 0.4% decrease in the mean attrition rate. This was the second decrease in mean attrition rate since prior to the 2011 RCS. The number of programs reporting the highest attrition rate remained at 1. The number of programs reporting the lowest attrition (0%) increased by 14 compared to the 2015 RCS.

Not included in **Table 21** are the attrition data for the 7 sleep specialist program options in the 2016 RCS. For the 2016 RCS, the mean attrition rate was 5.5% (3.6% for the 2015 RCS, 5.2% for the 2014 RCS and 8.5% for the 2013 RCS) with the highest rate of 25.0% and the lowest rate of 0%. The median attrition rate was 0%. No program options reported attrition rates above the CoARC-established threshold of 40% for the 2016 RCS.

### Attrition by Degree Offered, Institutional Type, and Institutional Control/Funding

Table 22 – RC Programmatic Attrition by Degree Offered for 2013 RCS through 2016 RCS									
D	2016 RCS	Designed	2015 RCS	Designed	2014 RCS	Degree Offered (N=442)	2013 RCS*		
Degree Offered (N=438)	Mean Attrition (# of programs above CoARC threshold)	Degree Offered (N=437)	Mean Attrition (# of programs above CoARC threshold)	Degree Offered (N=436)	Mean Attrition (# of programs above CoARC threshold)		Mean Attrition (# of programs above CoARC threshold)		
						Associate (n=382)	20.0% <b>(12)</b>		
Associate (n=370)	19.9% <b>(10)</b>	Associate (n=375)		Associate (n=375)	20.1% (10)	Associate & Baccalaur eate (n=3)	19.9%		
Baccalaure ate (n=64)	11.5% <mark>(1)</mark>	Baccalaur eate (n=58)	12.0% <mark>(1)</mark>	Baccalau reate (n=58)	13.4% <b>(2)</b>	Baccalaur eate (n=57)	13.5% <mark>(2)</mark>		
Masters (n=4)	5.6%	Masters (n=4)	9.3%	Masters (n=3)	8.3%	Masters (n=3)	11.1%		

**Table 22** compares programmatic attrition data in relation to the degree offered for the 2013 through 2016 RCS. For the 2016 RCS, programs offering the associate degree continued to have the highest mean attrition rate (19.9%) while programs offering the master's degree had the lowest 5.5%). The median attrition rate was 18.8% for associate degree programs, 10.5% for baccalaureate programs, and 3.6% for master's programs. When compared to the 2015 RCS, there was a decrease in mean attrition rate all three degree categories. (Note: Data for the programs that offered more than one degree type (*i.e.,* Associate and Baccalaureate or Baccalaureate and Masters) were separated in 2013 and a different CoARC number was assigned for each degree offered. These programs no longer report combined data as was the case in the 2012 and 2011 Reports on Accreditation.

For the 2016 RCS, 7 of the 11 programs above the CoARC threshold of 40% offered the AAS degree and the other three offered the AS degree. The remaining program offered a baccalaureate degree. For the 2015 RCS, 5 of the 9 programs above the threshold offered the AAS degree and the other three offered the AS degree. The remaining program offered a baccalaureate degree. For the 2014 RCS, 7 of the 12 programs above the threshold offered the AAS degree and the other three offered the AS degree. The remaining 2 offered the baccalaureate degree. For the 2013 RCS, 5 of the 14 programs above the threshold offered the AAS degree and the other seven offered the AS degree.



Table 23 – RC Programmatic Attrition by Institutional Type for 2013 RCS through 2016 RCS									
Institutional Type (N=438)	2016 RCS Mean Attrition (# of programs above CoARC threshold)	Institutional Type (N=437)	2015 RCS Mean Attrition (# of programs above CoARC threshold)	Institutional Type (N=436)	2014 RCS Mean Attrition (# of programs above CoARC threshold)	Institutional Type (N=442)	2013 RCS Mean Attrition (# of programs above CoARC threshold)		
Four-Year College or University (n=101)	13.2%	Four-Year College or University (n=96)	13.7%	Four-Year College or University (n=98)	14.6% <mark>(1)</mark>	Four-Year College or University (n=95)	15.1%		
Career or Technical College (n=9)	19.8%	Career or Technical College (n=5)	17.6%	Career or Technical College (n=6)	17.6%	Career or Technical College (n=7)	16.6%		
Community or Junior College (n=248)	20.3% <b>(8)</b>	Community or Junior College (n=251)	20.9% <b>(7)</b>	Community or Junior College (n=248)	20.6% <b>(8)</b>	Community College or Junior College (n=252)	20.3% <b>(9)</b>		
Academic HSC/Medical Center (n=14)	15.6% <mark>(1)</mark>	Academic HSC/Medical Center (n=13)	17.5% <mark>(1)</mark>	Academic HSC/Medical Center (n=12)	23.4% <b>(2)</b>	Academic HSC/Medical Center (n=12)	20.6% <mark>(2)</mark>		
Technical or Vocational School (n=64)	20.4% <b>(2)</b>	Technical or Vocational School (n=70)	20.7% <mark>(1)</mark>	Technical or Vocational School (n=70)	19.6% <mark>(1)</mark>	Technical or Vocational School (n=74)	20.6% <mark>(3)</mark>		
U.S. Military (n=2)	18.3%	U.S. Military (n=2)	18.9%	U.S. Military (n=2)	22.8%	U.S. Military (n=2)	10.2%		

**Table 23** compares programmatic attrition data in relation to institutional type for the 2013 RCS, through the 2016 RCS. For the 2016 RCS, programs located in Technical or Vocational Schools showed the highest mean attrition rate (20.4%). Programs located in Four-Year Colleges or Universities continued to have the lowest mean attrition rate of 13.2%. Compared to the 2015 RCS, programs located in all categories except Career or Technical Colleges showed a decrease in mean attrition rate. For the 2016 RCS, the median attrition rate was 11.6% for Four-Year Colleges or Universities, 24.7% for Career or Technical Colleges or Junior Colleges, 11.5% for Academic HSC/Medical Centers, and 18.9% for Technical or Vocational Schools.

For the 2016 RCS, 8 of the 11 programs above the CoARC threshold of 40% were located at a Community or Junior College. One program was located at an Academic HSC/Medical Center and two programs were located at a Technical/Vocational School. For the 2015 RCS, 7 of the 9 programs above the threshold were located at a Community or Junior College. One program was located at an Academic HSC/Medical Center and one program was located at a Technical/Vocational School. For the 2014 RCS, 8 of the 12 programs above the threshold were located at a Community or Junior College. Two programs were located at an Academic HSC/Medical Center. One program was located at a Technical/Vocational School and one was located at a Four-Year College/ University. For the 2013 RCS, 9 of the 14 programs above the threshold were located at a Community or Junior College. Three programs were located at a Technical/Vocational School. The remaining 2 programs were located at an Academic HSC/Medical Center.



Table 24 – RC Programmatic Attrition by Institutional Control for 2013 RC through 2016 RCS									
Institutional Control (N=438)	2016 RCS Mean Attrition (# of programs above CoARC threshold)	Institutional Control (N=437)	2015 RCS Mean Attrition (# of programs above CoARC threshold)	Institutional Control (N=436)	2014 RCS Mean Attrition (# of programs above CoARC threshold)	Institutiona I Control (N=442)	2013 RCS Mean Attrition (# of programs above CoARC threshold)		
Public/Not- For-Profit (n=346)	18.7% <mark>(9)</mark>	Public/Not- For-Profit (n=348)	19.2% <mark>(9)</mark>	Public/Not- For-Profit (n=346)	19.6% <b>(10)</b>	Public/Not- For-Profit (n=348)	19.3% <mark>(11)</mark>		
Private/For- Profit (Proprietary) (n=51)	18.9% <b>(1)</b>	Private/For- Profit (Proprietary) (n=55)	19.6%	Private/For- Profit (Proprietary) (n=55)	19.2% <b>(1)</b>	Private/For- Profit (Proprietary) (n=54)	21.0% <b>(3)</b>		
Private/Not- For-Profit (n=39)	16.1% <mark>(1)</mark>	Private/Not- For-Profit (n=32)	14.6%	Private/Not- For-Profit (n=33)	14.4% <mark>(1)</mark>	Private/Not- For-Profit (n=38)	15.1%		
Federal Government (n=2)	18.3%	Federal Government (n=2)	18.9%	Federal Government (n=2)	22.8%	Federal Government (n=2)	10.2%		

**Table 24** compares programmatic attrition data in relation to institutional control/funding for the 2013 through the 2016 RCS. For the 2016 RCS, programs controlled/funded by private/for-profit (proprietary) institutions continued to have the highest mean attrition rate, at 18.6%. Programs controlled/funded by private/not-for-profit institutions continued to have the lowest mean attrition rate at 16.1%. When compared to 2015 RCS data, programs in the private/not-for-profit sector showed an increase in mean attrition rate, while programs in the public/not-for-profit sector, the private/for-profit (proprietary) sector, and the federal government showed a decrease in mean attrition rate. For the 2016 RCS, the median attrition rate was 17.3% for the public/not-for-profit sector, 17.9% for the private/for-profit (proprietary) sector, and 13.6% for the private/not-for-profit sector.

For the 2016 RCS, 9 of the 11 programs above the CoARC threshold of 40% were controlled/funded by Public/Not-For-Profit institutions; one by a Private/For-Profit (Proprietary) institution and one by a Private/Not-For-Profit institution. For the 2015 RCS, all 9 programs above the threshold were controlled/funded by Public/Not-For-Profit institutions. For the 2014 RCS, 10 of the 12 programs above the threshold were controlled/funded by Public/Not-For-Profit institutions; one by a Private/For-Profit (Proprietary) institution and one by a Private/Not-For-Profit institution. For the 2013 RCS, 11 of the 14 programs above the threshold were controlled/funded by Public/Not-For-Profit institution. For the 2013 RCS, 11 of the 14 programs above the threshold were controlled/funded by Public/Not-For-Profit institutions. The remaining three programs were controlled/funded by Private/For-Profit (Proprietary) institutions.

#### Attrition by Enrollment Size

The mean attrition for programs with annual enrollments of less than 20 students in 2015 was 18.0% (n=238), which was a 1.0% decrease from the previous reporting year. The median was 16.5% (SD=11.4). The mean attrition for programs with annual enrollments of 20 or greater students in 2014 was 19.2% (n=194), which was a 0.3% increase from the previous reporting year. The median was 17.6% (SD = 11.3).



#### Positive (Job) Placement

Prior to November 1, 2015, positive (job) placement was defined by the CoARC as *"a graduate who, within the 3 year reporting period, is employed utilizing skills within the scope of practice of the respiratory care profession (i.e. full- or part-time, or per diem).*" In 2015, the CoARC eliminated the threshold (see 11/21/15 CoARC Statement on Job Placement posted at <u>http://www.coarc.com/13.html</u>. Data submitted with the 2015 RCS and prior reporting years reflect the previous job placement calculation.<sup>3</sup>

Table 25 – RC Positive (Job) Placement for 2011 RCS through 2016 RCS								
Reporting Years (# of programs submitting)	Mean (SD)	Maximum Value	Minimum Value	CoARC Threshold	# of Programs Below Threshold			
2011 RCS Data from 1/1/08 to 12/31/10 (N=399)	88.5% (12.7)	100%	0%	70%	21			
2012 RCS Data from 1/1/09 to 12/31/11 (N=422)	86.2% (12.5)	100%	0%	70%	24			
2013 RCS Data from 1/1/10 to 12/31/12 (N=422)	85.3% (11.7)	100%	13.8%	70%	41			
2014 RCS Data from 1/1/11 to 12/31/13 (N=424)	84.6% (11.7)	100%	20.0%	70%	39			
2015 RCS Data from 1/1/12 to 12/31/14 (N=434)	85.5% (10.4)	100%	50.0%	N/A	N/A			
2016 RCS Data from 1/1/13 to 12/31/15 (N=433)	84.3% (12.7)	100%	28.6%	N/A	N/A			

2016 RCS data on positive (job) placement (**Table 25**) show a total of 434 programs reporting positive placement rates. Five programs did not have placement data to report for the 2016 RCS. The mean placement rate decreased to 83.4% with the highest rate of 100% (n = 39) and the lowest rate of 28.6% (n=1). This is the lowest mean placement rate since prior to the 2011 RCS. The median placement rate was 86.7%.

When compared to the 2015 RCS data on placement rates, the 2016 RCS data shows a 1.2% decrease in the mean placement rate. The number of programs reporting the lowest placement remained at 1, while the number of programs reporting the highest placement rate (100%) increased from 37 (2015 RCS) to 39 (2016 RCS). Previously, the number of programs reporting the highest placement rate decreased from 64 (2011 RCS) to 42 (2012 RCS) to 35 (2013 RCS).

<sup>&</sup>lt;sup>3</sup> The definition in use at the time of the submission of the 2011 RCS was as follows: "A graduate who within ten (10) months after graduation is: a. employed in respiratory care (i.e. full- or part-time, per diem, etc.), or b. enrolled full- or part-time in another degree program, or c. serving in the military, or d. employed in the polysomnography field (i.e. full- or part-time, per diem, etc. for graduates of the polysomnography option of programs offering the same)."



Not included in **Table 25** are the placement data for the 7 sleep specialist program options in the 2016 RCS. For the 2016 RCS, the mean placement rate was 89.4% (median = 89.5%). For the 2015 RCS, the mean placement rate was 93.9% (median = 93.9%). The highest placement rate for the 2016 RCS was 100% (same for the 2015, 2014, 2013 and 2012 RCS) and the lowest rate of 66.7% (87.5% for the 2015 RCS, 66.7% for the 2014 RCS, 50.0% for the 2013 RCS, and 90.9% for the 2012 RCS).

## Placement by Degree Offered, Institutional Type, and Institutional Control/Funding

Table 26 – R	Table 26 – RC Positive (Job) Placement by Degree Offered for 2013 RCS though 2016 RCS									
	2016 RCS		2015 RCS		2014 RCS		2013 RCS*			
Degree Offered (N=433)	Mean Placement	Degree Offered (N=434)	Mean Placement	Degree Offered (N=424)	Mean Placement (# of programs below CoARC threshold)	Degree Offered (N=422)	Mean Placement (# of programs below CoARC threshold)			
Associate		Associate		Associato		Associate only (n=367)	84.2% <b>(40)</b>			
(n=369)	83.4%	(n=372)	84.3%		83.5% <mark>(37)</mark>	Associate & Baccalaureate (n=3)	94.4%			
Baccalaureate (n=60)	89.5%	Baccalaureate (n=58)	92.9%	Baccalaureate (n=57)	91.7% <mark>(2)</mark>	Baccalaureate only (n=55)	92.3% <mark>(1)</mark>			
Masters (n=4)	96.8%	Masters (n=4)	98.3%	Masters (n=1)	100%	Baccalaureate & Masters (n=0)	N/A			

**Table 26** compares positive placement data in relation to the degree offered for the 2013 through 2016 RCS. For the 2016 RCS, programs offering the Master's degree continued to have the highest mean placement rate (96.8%) in this category while programs offering the Associate degree continued to demonstrate the lowest mean placement rate at 83.2%. When compared to 2015 RCS data, all three degree categories showed decreases in mean placement rates. For the 2016 RCS, the median placement rate was 85.7% for associate degree programs, 92.9% for baccalaureate degree programs, and 97.4% for Master's degree programs. <u>Note</u>: Data for programs that offered more than one degree type (i.e., Associate and Baccalaureate or Baccalaureate and Masters) were separated in 2013 and a different CoARC number was assigned for each degree offered. These programs no longer report combined data as was the case in the 2012 and 2011 Reports on Accreditation.

For the 2014 RCS, 37 of the 39 programs below the CoARC threshold of 70% offered the Associate degree (12 AAS degree programs and 25 AS degree programs). The remaining 2 programs offered the Baccalaureate degree. For the 2013 RCS, 40 of the 41 programs below the threshold offered the Associate degree (1 AOS degree program, 7 AAS degree programs and 32 AS degree programs). The remaining program offered the Baccalaureate degree. For the 2012 RCS, 23 of the 24 programs below the threshold offered the threshold offered the Associate degree (7 AAS degree programs and 16 AS degree programs). The remaining program offered the Baccalaureate degree.



Table 27 – RC Positive (Job) Placement by Institutional Type for 2013 RCS though 2016 RCS											
	2016 RCS		2015 RCS		2014 RCS		2013 RCS				
Institutional Type (N=433)	Mean Placement	Institutional Type (N=434)	Mean Placement	Institutional Type (N=424)	Mean Placement (# of programs below CoARC threshold)	Institutional Type (N=422)	Mean Placement (# of programs below CoARC threshold)				
Four-Year College or University (n=97)	87.3%	Four-Year College or University (n= 96)	89.8%	Four-Year College or University (n=95)	87.7% <b>(9)</b>	Four-Year College or University (n=90)	88.6% <b>(4)</b>				
Career or Technical College (n=9)	86.8%	Career or Technical College (n=5)	89.4%	Career or Technical College (n=6)	87.7%	Career or Technical College (n=7)	85.5%				
Community or Junior College (n=248)	84.5%	Community or Junior College (n=248)	84.8%	Community or Junior College (n=242)	84.5% <b>(20)</b>	Community or Junior College (n=245)	85.8% <b>(20)</b>				
Academic HSC/Medical Center (n=13)	81.1%	Academic HSC/Medical Center (n=13)	92.6%	Academic HSC/Medical Center (n=11)	95.7%	Academic HSC/Medical Center (n=11)	94.0%				
Technical or Vocational School (n=64)	78.8%	Technical or Vocational School (n=70)	80.1%	Technical or Vocational School (n=68)	78.5% <mark>(10)</mark>	Technical or Vocational School (n=67)	76.9% <mark>(17)</mark>				
U.S. Military (n=2)	86.7%	U.S. Military (n=2)	95.6%	U.S. Military (n=2)	94.8%	U.S. Military (n=2)	97.3%				

**Table 27** compares positive placement data in relation to institutional type for the 2013 RCS through 2016 RCS. For the 2016 RCS, programs located in the Four-Year Colleges or Universities had the highest mean placement rate (87.3%). Programs located in Technical or Vocational Schools continued to demonstrate the lowest mean placement rate at 78.8%. Compared to the 2015 RCS, all categories showed a decrease in mean placement rate. For the 2016 RCS, the median placement rate was 90.6% for Four-Year Colleges or Universities, 88.1% for Career or Technical Colleges, 86.4% for Community or Junior Colleges, 92.3% for Academic HSC/Medical Centers, and 81.8% for Technical or Vocational Schools.

For the 2014 RCS, 20 of the 39 programs below the CoARC threshold of 70% were located at a Community or Junior College. Ten programs were located at a Technical or Vocational School and nine programs at a Four-Year College or University. For the 2013 RCS, 20 of the 41 programs below the threshold were located at a Community or Junior College, seventeen at a Technical or Vocational School and four programs at a Four-Year College or University. For the 2012 RCS, 11 of the 24 programs below the threshold were located at a Community or Junior College, nine programs at a Technical or Vocational School and four programs at a Four-Year College or University. For the 2012 RCS, 11 of the 24 programs below the threshold were located at a Community or Junior College, nine programs at a Technical or Vocational School and three at a Four-Year College or University. The remaining program was at a Career/Technical College.



Table 28 – RC	Table 28 – RC Positive (Job) Placement by Institutional Control for 2013 RCS though 2016 RCS										
	2016 RCS		2015 RCS		2014 RCS		2013 RCS				
Institutional Control (N=433)	Mean Placement	Institutional Control (N=434)	Mean Placement	Institutional Control (N=424)	Mean Placement (# of programs below CoARC threshold)	Institutional Control (N=422)	Mean Placement (# of programs below CoARC threshold)				
Public/Not-For- Profit (n=345)	85.6%	Public/Not- For-Profit (n=346)	86.5%	Public/Not- For-Profit (n=340)	85.8% <b>(22)</b>	Public/Not- For-Profit (n=339)	86.8% <b>(20)</b>				
Private/For-Profit (Proprietary) (n=51)	75.1%	Private/For- Profit (Proprietary) (n=54)	76.8%	Private/For- Profit (Proprietary) (n=51)	75.1% <b>(12)</b>	Private/For- Profit (Proprietary) (n=47)	73.3% <b>(16)</b>				
Private/Not-For- Profit (n=35)	85.6%	Private/Not- For-Profit (n=32)	88.5%	Private/Not- For-Profit (n=31)	86.4% <b>(5)</b>	Private/Not- For-Profit (n=34)	85.6% <b>(5)</b>				
Federal Government (n=2)	86.7%	Federal Government (n=2)	95.6%	Federal Government (n=2)	94.8%	Federal Government (n=2)	97.3%				

**Table 28** compares positive placement data in relation to institutional control/funding for the 2013 RCS through the 2016 RCS. Programs controlled/funded by the federal government continued to demonstrate the highest mean placement rate at 86.7%. Programs controlled/funded by private/for-profit (proprietary) institutions continued to demonstrate the lowest mean placement rate at 75.1%. When compared to 2015 RCS data, all categories showed a decrease in mean placement rate. For the 2016 RCS, the median placement rate was 87.8% for the public/not-for-profit sector, 75.9% for the private/for-profit (proprietary) sector, and 88.9% for the private/not-for-profit sector.

For the 2014 RCS, 22 of the 39 programs below the CoARC threshold of 70% were controlled /funded by Public/Not-For-Profit institutions. Twelve programs were controlled/funded by Private/For-Profit (Proprietary) institutions. The remaining 5 programs were controlled/funded by Private/Not-For-Profit institutions. For the 2013 RCS, 20 of the 41 programs below the threshold were controlled/funded by Public/Not-For-Profit institutions, sixteen by Private/For-Profit (Proprietary) institutions and the remaining 5 programs by Private/Not-For-Profit institutions. For the 2012 RCS, 12 of the 24 programs below the threshold were controlled/funded by Public/Not-For-Profit institutions, nine by Private/For-Profit (Proprietary) institutions and the remaining 3 by Private/Not-For-Profit institutions.

#### **Placement by Enrollment Size**

The mean placement for programs with annual enrollments of less than 20 students in 2015 was 86.1% (n=240), a decrease of 0.1% from the previous reporting year. The median was 87.9% (SD=11.2). Twenty-four programs did not report enrollments for 2015 and therefore were not included in the analysis. The mean placement for programs with annual enrollments of 20 or greater students in 2016 was 83.1% (n=169), a decrease of 1.5% from the previous reporting year. The median was 85.3% (SD=12.3).



#### CRT Credentialing Success

The National Board for Respiratory Care's (NBRC) Therapist Multiple Choice (TMC) Examination administered by the NBRC is designed to objectively measure essential knowledge, skills, and abilities required of entry-level respiratory therapists, as well as determine eligibility for the Clinical Simulation Examination. With the advent of the new TMC Exam in January of 2015, all graduates seeking to enter the profession need only take a single written examination. The TMC exam has two cut scores; graduates attaining the lower cut score will obtain the Certified Respiratory Therapist (CRT) credential. Achieving the high cut score means that a graduate both earns the CRT credential and is eligible to take the Clinical Simulation Exam (CSE). Graduates who successfully complete the TMC at the high cut score and pass the CSE earn the RRT credential.

<u>CRT Credentialing Success</u> is defined by the CoARC as the percentage of program graduates who obtain the CRT credential upon successful achievement of the low cut score on the TMC Examination, independent of the number of TMC exam attempts. The calculation is derived by dividing the total # of CRTs (numerator) by the # of graduates (denominator) in a three year reporting period (e.g., 2013-15). Since the 2012 RCS, this calculation excludes graduates who earned the CRT credential prior to matriculation into the program (i.e., advanced placement)<sup>4</sup>. This calculation does include baccalaureate and graduate students who earned the CRT credential in CoARC-accredited programs approved to grant special certificates of completion for CRT/RRT eligibility under the former CoARC policy 13.0. Policy 13 was withdrawn at the end of 2015. *Note: This metric is not the same as the NBRC CRT pass rate which measures the number of candidates passing the exam divided by the number of candidates attempting the exam.* 

Table 29 – CRT Credentialing	Success fo	or 2011 RCS	through 20	16 RCS	
Reporting Years (# of programs submitting)	Mean (SD)	Maximum Value	Minimum Value	CoARC Threshold	# of Programs Below Threshold
2011 RCS Data from 1/1/08 to 12/31/10 (N=399)	93.1% (8.6)	100%	27.3%	80%	20
2012 RCS Data from 1/1/09 to 12/31/11 N=422)	92.1% (9.6)	100%	39.4%	80%	32
2013 RCS Data from 1/1/10 to 12/31/12 (N=422)	91.8% (9.7)	100%	45.5%	80%	41
2014 RCS Data from 1/1/11 to 12/31/13 (N=424)	92.4% (8.7)	100%	52.6%	80%	39
2015 RCS Data from 1/1/12 to 12/31/14 (N=434)	92.3% (8.4)	100%	55.9%	80%	35
2016 RCS Data from 1/1/13 to 12/31/15 (N=433)	92.5% (8.7)	100%	46.7%	80%	35

<sup>&</sup>lt;sup>4</sup> The 2011 RCS CRT credentialing success calculation did not subtract the number of students enrolling in an RC program having already earned a CRT credential prior to enrollment.



2016 RCS data on CRT credentialing success (Table 29) show a total of 433 programs reporting. Five programs did not have any CRT credentialing success data to report for the 2016 RCS. The mean CRT credentialing success was 92.5% with the highest rate of 100% (n=110) and the lowest rate of 46.7% (n=1). A total of 35 programs (8.1% of total) reported CRT credentialing success rates below the CoARC-established threshold of 80%. As per CoARC Standard 3.11, these programs began a dialogue with the CoARC to develop an appropriate plan of action (i.e., a progress report) for program improvement. The median CRT credentialing success rate for the 2015 RCS was 95.2%.

When compared to the 2015 RCS data on CRT credentialing success rates, the 2016 RCS data shows a 0.2% increase in the mean success rate. The program reporting the lowest mean success rate was at 46.7%. The number of programs reporting the highest success rate (100%) increased slightly from 104 (2013 RCS) to 109 (2014 RCS), decreased to 103 (2015 RCS) and is now at its highest level of 110 (2016 RCS). The number of programs reporting CRT credentialing success rates below the CoARC-established threshold decreased from 9.7% of total programs reporting in the 2013 RCS to 9.2% in the 2014 RCS to 8.1% in the 2015 and 2016 RCS.

### CRT Credentialing Success by Degree Offered, Institutional Type, and Institutional Control/Funding

	2016 RCS	9	2015 RCS	Strered for 201	2014 RCS	,	2013 RCS*
Degree Offered (n=433)	Mean CRT Success (# of programs below CoARC threshold)	Degree Offered (n=434)	Mean CRT Success (# of programs below CoARC threshold)	Degree Offered (n=424)	Mean CRT Success (# of programs below CoARC threshold)	Degree Offered (n=422)	Mean CRT Success (# of programs below CoARC threshold)
Accesicto		Accesiete		Accesicto		Associate only (n=365)	91.1% (39)
Associate (n=369)	91.8% <mark>(33)</mark>	(n=372)	Associate (n=372) 91.6% (34) Asso (n=3		91.8% <b>(36)</b>	Associate & Baccalaureate (n=3)	95.7%
Baccalaureate (n=60)	96.1% <mark>(2)</mark>	Baccalaureate (n=58)	96.4% <b>(1)</b>	Baccalaureate (n=57)	96.3% <b>(3)</b>	Baccalaureate only (n=51)	96.3% <mark>(2)</mark>
Masters (n=4)	100%	Masters (n=4)	100%	Masters (n=1)	100%	Baccalaureate & Masters (n=3)	N/A

Table 30 -CPT Credentialing Success by Degree Offered for 2013 PCS though 2016 PCS

Table 30 compares CRT credentialing success data in relation to the degree offered for the 2013 RCS through the 2016 RCS. For the 2016 RCS, RC Programs offering Master's degrees had the highest mean (100%). RC Programs offering the associate degree had the lowest mean (91.8%). The median success rate was 93.9% for associate degree programs and 98.5% for baccalaureate degree programs. Note: Data from programs that offered more than one degree type (i.e., Associate and Baccalaureate or Baccalaureate and Masters) were separated in 2013 and a separate CoARC number was assigned for each degree offered. These programs no longer report combined data, as was the case in the 2012 and 2011 Reports on Accreditation.

For the 2016 RCS, 33 of the 35 programs below the CoARC threshold of 80% offered the Associate degree (18 AAS degree programs, 13 AS degree programs, and 2 AST degree programs). The remaining 2 programs offered the Baccalaureate degree. For the 2015 RCS, 34 of the 35 programs below the threshold offered the Associate degree (20 AAS degree programs, 12 AS degree programs, and 2 AST degree programs). The remaining program offered the Baccalaureate degree. For the 2014 RCS, 36 of the 39



programs below the threshold offered the Associate degree (14 AAS degree programs and 22 AS degree programs). The remaining 3 programs offered the Baccalaureate degree. For the 2013 RCS, 39 of the 41 programs below the threshold offered the Associate degree (13 AAS degree programs, 25 AS degree programs, and 1 AST degree program). The remaining 2 programs offered the Baccalaureate degree.

#### 2016 First-Time Pass Rate Data by Degree

The CoARC is collecting outcomes data over the next few years in order to identify an outcomes threshold for the high cut score on the NBRC Therapist Multiple Choice (TMC) Examination. This threshold would be the minimum percentage of graduates in a three-year reporting period that must achieve the higher cut score for a program to avoid a citation. Programs will be required to include data for this outcome on their RCS beginning in July, 2018.

Candidates who achieve the low cut score on the TMC earn the CRT credential. For 2016, the mean first-time pass rate for the TMC Exam at the <u>low cut score</u> was 82.5% for Associate degree programs (n=344; median 87.5%; SD 17.3), 88.5% for Baccalaureate degree programs (n=51; median 93.8%; SD 14.4), and 98.2% for Master's degree programs (n=3; median 100%; SD 3.0). The mean number of TMC Exam first-time passers per program was 13 for Associate degree programs, 12 for Baccalaureate degree programs, and 12 for Master's degree programs.

Table 31 – C	RT Credentia	ling Success	by Institutio	nal Type for 2	013 RCS thou	igh 2016 RCS	;
	2016 RCS		2015 RCS		2014 RCS		2013 RCS
Institutional Type (N=433)	Mean CRT Success (# of programs below CoARC threshold)	Institutional Type (N=434)	Mean CRT Success (# of programs below CoARC threshold)		Mean CRT Success (# of programs below CoARC threshold)		Mean CRT Success (# of programs below CoARC threshold)
Four-Year College or University (n=97)	93.7% <b>(6)</b>	Four-Year College or University (n=96)	93.4% <b>(7)</b>	Four-Year College or University (n=95)	94.0% <b>(10)</b>	Four-Year College or University (n=90)	94.4% <mark>(4)</mark>
Career or Technical College (n=9)	93.3%	Career or Technical College (n=5)	94.9%	Career or Technical College (n=6)	94.5%	Career or Technical College (n=7)	93.0%
Community or Junior College (n=248)	92.6% <mark>(16)</mark>	Community or Junior College (n=248)	92.4% <mark>(19)</mark>	Community or Junior College (n=242)	93.0% <mark>(14)</mark>	Community or Junior College (n=245)	92.2% <b>(20)</b>
Academic HSC/Medical Center (n=13)	96.1% <b>(1)</b>	Academic HSC/Medical Center (n=13)	97.9%	Academic HSC/Medical Center (n=11)	98.6%	Academic HSC/Medical Center (n=11)	97.6%
Technical or Vocational School (n=64)	89.3% <mark>(11)</mark>	Technical or Vocational School (n=70)	89.5% <mark>(8)</mark>	Technical or Vocational School (n=68)	87.1% <mark>(14)</mark>	Technical or Vocational School (n=67)	86.0% <b>(16)</b>
U.S. Military (n=2)	82.4% <mark>(1)</mark>	U.S. Military (n=2)	80.3% <mark>(1)</mark>	U.S. Military (n=2)	82.6% <mark>(1)</mark>	U.S. Military (n=2)	79.0% <mark>(1)</mark>

**Table 31** compares CRT credentialing success data in relation to institutional type for the 2013 through 2016 RCS. For the 2016 RCS, RC Programs located in Academic HSC/Medical Centers continued to demonstrate the highest mean CRT credentialing success at 96.1%. RC Programs located in the U.S. Military had the lowest mean CRT credentialing success at 82.4%. The Career or Technical Colleges, Technical or Vocational Schools, and Academic HSC/Medical Center categories all showed slight decreases



in mean CRT credentialing success when compared to the 2015 RCS. The other categories showed slight increases in mean CRT credentialing success when compared to the 2015 RCS. For the 2016 RCS, the median CRT credentialing success rate was 96.8% for Four-Year Colleges or Universities, 95.2% for Career or Technical Colleges, 95.2% for Community or Junior Colleges, 98.4% for Academic HSC/Medical Centers, and 91.7% for Technical or Vocational Schools.

For the 2016 RCS, 16 of the 35 programs below the CoARC threshold of 80% were located at a Community or Junior College, 11 were at a Technical or Vocational School and 6 programs were at a Four-Year College or University. The two remaining programs were at a U.S. Military institution and an Academic HSC/Medical Center. For the 2014 RCS, 14 of the 39 programs below the threshold were located at a Community or Junior College, fourteen at a Technical or Vocational School and ten programs were at a Four-Year College or University. The remaining program was at a U.S. Military institution. For the 2013 RCS, 20 of the 41 programs below the threshold were located at a Community or Junior College, sixteen were at a Technical or Vocational School and four programs were at a Four-Year College or University. The remaining programs were at a Four-Year College or University. The remaining programs were at a Four-Year College or University. The remaining programs were at a Four-Year College or University. The remaining programs were at a Four-Year College or University. The remaining programs were at a Four-Year College or University. The remaining programs were at a Four-Year College or University. The remaining programs were at a Four-Year College or University. The remaining program was at a U.S. Military institution.

#### 2016 First-Time Pass Rate Data by Institutional Type

The mean first-time pass rate for the TMC Exam at the <u>low cut score</u> was 84.4% for Four-Year Colleges or Universities (n=89; median=88.9%; SD=18), 93.1% for Career or Technical Colleges (n=8; median=96.4%; SD=11.3), 83.6% for Community or Junior Colleges (n=233; median=88.9%; SD=17.3), 97.7% for Academic HSC/Medical Centers (n=7; median=100%; SD=2.9), 78.1% for Technical or Vocational Schools (n=61; median=77.8%; SD=14.5), and 79.7% for U.S. Military programs (n=2). The mean number of TMC Exam first-time passers per program was 12 for Four-Year Colleges or Universities, 20 for Career or Technical Colleges, 12 for Community or Junior Colleges, 12 for Academic HSC/Medical Centers, 15 for Technical or Vocational Schools, and 64 for U.S. Military programs.

Table 32 – CR	Table 32 – CRT Credentialing Success by Institutional Control for 2013 RCS though 2016 RCS											
Institutional Control (N=433)	2016RCS Mean CRT Success (# of programs below CoARC threshold)	Institutional Control (N=434)	2015 RCS Mean CRT Success (# of programs below CoARC threshold)	Institutional Control (N=424)	2014 RCS Mean CRT Success (# of programs below CoARC threshold)	Institutional Control (N=422)	2013 RCS Mean CRT Success (# of programs below CoARC threshold)					
Public/Not-For- Profit (n=345)	93.3% <b>(17)</b>	Public/Not-For- Profit (n=346)	93.1% <b>(22)</b>	Public/Not-For- Profit (n=340)	93.4% <b>(19)</b>	Public/Not-For- Profit (n=339)	92.7% <b>(25)</b>					
Private/For-Profit (Proprietary) (n=51)	88.2% (11)	Private/For- Profit (Proprietary) (n=54)	87.5% <b>(9)</b>	Private/For- Profit (Proprietary) (n=51)	86.2% <b>(12)</b>	Private/For- Profit (Proprietary) (n=47)	86.0% <b>(10)</b>					
Private/Not-For- Profit (n=35)	90.8% <mark>(6)</mark>	Private/Not-For- Profit (n=32)	91.8% <mark>(3)</mark>	Private/Not- For-Profit (n=31)	91.8% <b>(7)</b>	Private/Not- For-Profit (n=34)	91.1% <b>(5)</b>					
Federal Government (n=2)	82.4% <b>(1)</b>	Federal Government (n=2)	80.3% <b>(1)</b>	Federal Government (n=2)	82.6% <b>(1)</b>	Federal Government (n=2)	79.0% <b>(1)</b>					

 Table 32 compares CRT credentialing success data in relation to institutional control/funding for the

 2013 RCS through the 2016 RCS.
 For the 2016 RCS, programs controlled/funded by Public/Not-For-Profit



institutions continued to demonstrate the highest mean CRT credentialing success at 93.3%. Programs controlled/funded by the Federal Government continued to demonstrate the lowest mean CRT credentialing success rate (82.4%). Only the private/not-for-profit sector showed a decrease in mean CRT credentialing success for the 2016 RCS when compared to the 2015 RCS. For the 2016 RCS, the median CRT credentialing success rate was 95.7% for the public/not-for-profit sector, 90.6% for the private/for-profit (proprietary) sector, and 93.3% for the private/not-for-profit sector.

For the 2016 RCS, 17 of the 35 programs below the CoARC threshold of 80% were controlled/funded by Public/Not-For-Profit institutions, eleven programs by Private/For-Profit (Proprietary) institutions and six by Private/Not-For-Profit institutions. The remaining program was controlled/funded by the Federal Government. For the 2015 RCS, 22 of the 35 programs below the threshold were controlled/funded by Public/Not-For-Profit institutions, nine programs by Private/For-Profit (Proprietary) institutions and three by Private/Not-For-Profit institutions. The remaining program was controlled/funded by the Federal Government. For the 2014 RCS, 19 of the 39 programs below the threshold were controlled/funded by Public/Not-For-Profit institutions, twelve by Private/For-Profit (Proprietary) institutions and seven programs by Private/Not-For-Profit institutions. The remaining program was controlled/funded by the Federal Government. For the 2013 RCS, 25 of the 41 programs below the threshold were controlled/funded by Public/Not-For-Profit institutions, ten programs by Private/For-Profit (Proprietary) institutions and five by Public/Not-For-Profit institutions. The remaining program was controlled/funded by Public/Not-For-Profit institutions, ten programs by Private/For-Profit (Proprietary) institutions and five by Private/Not-For-Profit institutions. The remaining program was controlled/funded by the Federal Government.

#### 2016 First-Time Pass Rate Data by Institutional Control

The mean first-time pass rate for the TMC Exam at the <u>low cut score</u> was 84.8% for the public/notfor-profit sector (n=316; median=89.7%; SD=16.3), 82.7% for the private/not-for-profit sector (n=33; median=85.7%; SD=18.1), 74.5% for the private/for-profit (proprietary) sector (n=49; median=75.6%; SD=19), and 79.7% for the federal government (n=2). The mean number of TMC Exam first-time passers per program was 12 for the public/not-for-profit sector, 12 for the private/not-for-profit sector, 19 for the private/for-profit (proprietary) sector, and 64 for the federal government.

#### CRT Credentialing Success by Enrollment Size

The mean CRT credentialing success for programs with annual enrollments of less than 20 students in 2015 was 92.4% (n=240). Twenty-four programs did not report 2015 enrollments and therefore were not included in the analysis. The median was 94.9% (SD = 8.7). The mean CRT credentialing success for programs with annual enrollments of 20 or greater students in 2015 was 93.2% (n=169). The median was 95.9% (SD = 7.9).



#### **RRT Credentialing Success**

RRT Credentialing Success is defined by the CoARC as the percentage of graduates who earn the RRT credential by achieving the high cut score on the Therapist Multiple-Choice Examination (TMC) and subsequently passing the Clinical Simulation Examination (CSE), regardless of the number of TMC or CSE exam attempts. RRT credentialing success is derived by dividing the total # of those achieving the RRT (numerator) by the # of graduates (denominator) in each three year reporting period. Note: This metric is not the same as the NBRC RRT pass rate, which measures the number of candidates passing the exam divided by the number of candidates attempting the exam. The Therapist Multiple-Choice (TMC) Examination administered by the NBRC is designed to measure the essential knowledge, skills, and abilities acquired by graduates of entry-level respiratory therapy educational programs, and determine their eligibility for the Clinical Simulation Examination. Currently, the RRT credential is required by Ohio, California, and Arizona to enter practice. Accordingly, graduates of CoARC-accredited programs in other states can choose to forego the CSE examination after earning the CRT credential and still obtain a license to practice. While programs are required to provide RRT outcomes data on the RCS, no threshold for this outcome has been established by the CoARC and, accordingly, no accreditation actions are taken based on RRT credentialing success. For more information related to this outcome measure, download the CoARC's December 10, 2015 position statement regarding exam-based outcome measures available at www.coarc.com/13.html.

Table 33 – RRT Credentialing S	Success for 20	011 RCS throu	gh 2016 RCS	
Reporting Years (# of programs submitting)	Mean (SD)	Maximum Value	Minimum Value	CoARC Threshold
2011 RCS Data from 1/1/08 to 12/31/10 (N=394)	61.2% (21.4)	100%	0%	N/A
2012 RCS Data from 1/1/09 to 12/31/11 (N=412)	62.2% (21.1)	100%	0%	N/A
2013 RCS Data from 1/1/10 to 12/31/12 (N=422)	63.4% (22.1)	100%	0%	N/A
2014 RCS Data from 1/1/11 to 12/31/13 (N=424)	67.9% (21.3)	100%	0%	N/A
2015 RCS Data from 1/1/12 to 12/31/14 (N=434)	70.5% (20.4)	100%	11.1%	N/A
2016 RCS Data from 1/1/13 to 12/31/15 (N=433)	72.7% (20.0)	100%	15.6%	N/A

2016 RCS data on RRT credentialing success (**Table 33**) show a total of 433 programs reporting (5 programs did not have any RRT credentialing success data to report). The mean RRT credentialing success was 72.7% with the highest rate (100%) achieved by 28 programs and the lowest rate of 15.6% (n=1). The median RRT credentialing success rate for the 2016 RCS was 77.1%. When compared to the previous RCS data, the 2016 data continued to show a considerable increase (2.2%), with an overall increase of 11.5% since the 2011 RCS. The number of programs reporting the lowest RRT credentialing success decreased from 4 (2013 RCS) to 1 (2014 RCS, 2015 RCS, and 2016 RCS) with the lowest mean RRT credentialing success rate increasing from 11.1% to 15.6%. The number of programs reporting the highest RRT credentialing success rate (100%) increased from 7 for the 2012 RCS, to 13 for the 2013 RCS, to 19 for the 2014 RCS, to 23 for the 2015 RCS to 28 for the 2016 RCS.



Table 34 –RRT	Credentia	ling Success b	y Degree C	Offered for 2013	RCS thou	gh 2016 RCS	
Degree Offered	2016 RCS	Degree Offered	2015 RCS	Degree Offered	2014 RCS	Degree Offered	2013 RCS*v
(N=433)	Mean RRT Success	(N=434)	Mean RRT Success	(N=424)	Mean RRT Success	(N=422)	Mean RRT Success
Associate (n=369)		Associate	67.8%	Associate		Associate only (n=367)	60.7%
	70.5%	(n= 372)		(n= 366)	65.5%	Associate & Baccalaureate (n=3)	58.3%
Baccalaureate (n=60)	84.9%	Baccalaureate (n=58)	85.5%	Baccalaureate (n=57)	82.3%	Baccalaureate only (n=55)	81.1%
Masters (n=4)	96.9%	Masters (n=4)	97.0%	Masters (n=1)	100%	Baccalaureate & Masters (n=0)	N/A

**Table 34** compares RRT credentialing success data in relation to the degree offered for the 2013 RCS through the 2016 RCS. For the 2016 RCS, RC programs offering Master's degrees had the highest mean RRT credentialing success (96.9%). RC programs offering Associate degrees had the lowest mean RRT credentialing success (70.5%). Both Associate and Baccalaureate degree categories continued to demonstrate an increase in mean RRT credentialing success when compared to previous RCS data. For the 2016 RCS, the mean RRT credentialing success for AAS programs (n=204) was 69.5% and for AS programs it was 72.8% (n=159). The median RRT credentialing success rate increased to 73.9% for Associate degree programs and 88.0% for Baccalaureate degree programs for the 2016 RCS. <u>Note</u>: Data from the programs that offered more than one degree type (i.e., Associate and Baccalaureate or Baccalaureate and Masters) were separated in 2013 and a separate CoARC number was assigned for each degree offered. Accordingly, these programs no longer report combined data as was the case in the 2012 and 2011 Reports on Accreditation.

#### 2016 First-Time Pass Rate Data by Degree

The CoARC is collecting outcomes data over the next few years in order to identify an outcomes threshold for the high cut score on the NBRC Therapist Multiple Choice (TMC) Examination. This threshold would be the minimum percentage of graduates in a three-year reporting period that must achieve the high cut score for a program to avoid a citation. Programs will be required to include data for this outcome beginning with the RCS due on July 1, 2018. Data from 2016 indicate the following:

- The mean first-time pass rate for the TMC Exam at the <u>high cut score</u> was 72.9% for Associate degree programs (n=343; median =75.0%; SD=20.6), 82.2% for Baccalaureate degree programs (n=52; median=85.7%; SD=16), and 92.0% for Master's degree programs (n=3; median=89.5%; SD=7). The mean number of TMC Exam first-time passers per program was 11 for Associate degree programs, Baccalaureate degree programs, and Master's degree programs;
- The mean first-time pass rate for the CSE Exam was 59.8% for Associate degree programs (n=319; median=60; SD=20), 62.8% for Baccalaureate degree programs (n=53; median=62.5%; SD=23.2), and 85.0% for Master's degree programs (n=3; median=78.6%; SD=13). The mean number of CSE



Exam first-time passers per program was 8 for Associate degree programs, 7 for Baccalaureate degree programs, and 9 for Master's degree programs.

Table 35 – R	RT Creden	tialing Succes	ss by Institu	tional Type fo	or 2013 RC	S though 20	16 RCS
Institutional	2016 RCS	Institutional	2015 RCS	Institutional	2014 RCS	Institution	2013 RCS
Туре (N=433)	Mean RRT Success	Туре (N=434)	Mean RRT Success	Туре (N=424)	Mean RRT Success	al Type (N=422)	Mean RRT Success
Four-Year College or University (n=97)	78.5%	Four-Year College or University (n= 96)	76.8%	Four-Year College or University (n=95)	73.2%	Four-Year College or University (n=90)	69.8%
Career or Technical College (n=9)	69.1%	Career or Technical College (n=5)	69.2%	Career or Technical College (n=6)	63.3%	Career or Technical College (n=7)	59.5%
Community or Junior College (n=248)	72.3%	Community or Junior College (n=248)	69.9%	Community or Junior College (n=242)	67.8%	Community or Junior College (n=245)	63.3%
Academic HSC/Medical Center (n=13)	89.4%	Academic HSC/Medical Center (n=13)	90.9%	Academic HSC/Medical Center (n=11)	91.0%	Academic HSC/Medica I Center (n=11)	88.8%
Technical or Vocational School (n=64)	64.0%	Technical or Vocational School (n=7-)	61.3%	Technical or Vocational School (n=68)	58.2%	Technical or Vocational School (n=67)	52.1%
U.S. Military (n=2)	30.1%	U.S. Military (n=2)	31.3%	U.S. Military (n=2)	32.1%	U.S. Military (n=2)	26.4%

**Table 35** compares RRT credentialing success data in relation to institutional type for the 2013 RCS through the 2016 RCS. For the 2016 RCS, RC programs located in Academic HSC/Medical Centers continued to have the highest mean RRT credentialing success at 89.4%. RC programs located at U.S. Military facilities continued to the lowest mean RRT credentialing success at 30.1%. Increases in mean RRT credentialing success or Universities, Community or Junior Colleges, and Technical or Vocational Schools when compared to 2015 RCS data. For the 2016 RCS, the median RRT credentialing success rate was 82.6% for Four-Year Colleges or Universities, 67.0% for Career or Technical Colleges, 76.4% for Community or Junior Colleges, 95.7% for Academic HSC/Medical Centers, and 67.4% for Technical or Vocational Schools.

#### 2016 First-Time Pass Rate Data by Institutional Type

The mean first-time pass rate at the high cut score for the TMC Exam was 77.0% for Four-Year Colleges or Universities (n=87; median=80%; SD=19.8), 84.7% for Career or Technical Colleges (n=8; median=87.2%; SD=17), 74.2% for Community or Junior Colleges (n=231; median=77.3%; SD=20.9), 91.4% for Academic HSC/Medical Centers (n=7; median=92.9%; SD=8.7), 67.3% for Technical or Vocational Schools (n=61; median=65.4%; SD=17.7), and 72.3% for U.S. Military programs (n=2). The mean number of TMC Exam first-time passers at the high cut score per program was 11 for Four-Year Colleges or Universities, 18 for Career or Technical Colleges, 11 for Community or Junior Colleges, 11 for Academic HSC/Medical Centers, 13 for Technical or Vocational Schools, and 58 for U.S. Military programs.

The mean first-time pass rate for the CSE Exam was 60.3% for Four-Year Colleges or Universities (n=82; median=60%; SD=22.5), 55.3% for Career or Technical Colleges (n=8; median=55; SD=21.2), 60.7% for Community or Junior Colleges (n=218; median=60; SD=19.5), 68.3% for Academic HSC/Medical Centers



(n=9; median=66.7%; SD=28.1), 59% for Technical or Vocational Schools (n=56; median=63.4%; SD=21), and 62.4% for U.S. Military programs (n=2). The mean number of CSE Exam first-time passers per program was 7 for Four-Year Colleges or Universities, 10 for Career or Technical Colleges, 7 for Community or Junior Colleges, 7 for Academic HSC/Medical Centers, 9 for Technical or Vocational Schools, and 18 for U.S. Military programs.

Table 36 – RR	Table 36 – RRT Credentialing Success by Institutional Control for 2013 RCS though 2016 RCS										
Institutional Control (N=433)	2016 RCS Mean RRT Success	Institutional Control (N=434)	2015 RCS Mean RRT Success	Institutional Control (N=424)	2014 RCS Mean RRT Success	Institutional Control (N=422)	2013 RCS Mean RRT Success				
Public/Not-For- Profit (n=345)	74.8%	Public/Not-For- Profit (n=346)	72.6%	Public/Not-For- Profit (n=340)	69.9%	Public/Not-For- Profit (n=339)	65.6%				
Private/For- Profit (Proprietary) (n=51)	62.3%	Private/For- Profit (Proprietary) (n=54)	58.7%	Private/For- Profit (Proprietary) (n=51)	57.5%	Private/For- Profit (Proprietary) (n=47)	52.9%				
Private/Not-For- Profit (n=35)	69.9%	Private/Not- For-Profit (n=32)	69.4%	Private/Not- For-Profit (n=31)	64.4%	Private/Not- For-Profit (n=34)	57.1%				
Federal Government (n=2)	30.1%	Federal Government (n=2)	31.3%	Federal Government (n=2)	32.1%	Federal Government (n=2)	26.4%				

**Table 36** compares RRT credentialing success data in relation to institutional control/funding for the 2013 RCS through the 2016 RCS. For the 2016 RCS, RC Programs controlled/funded by public/not-for-profit institutions continued to demonstrate the highest mean RRT credentialing success (74.8%). RC Programs controlled/funded by the federal government continued to demonstrate the lowest mean RRT credentialing success rate (30.1%). Increases in mean RRT credentialing success occurred for RC programs in all categories, except the Federal Government when compared to 2015 RCS data. For the 2016 RCS, the median RRT credentialing success rate was 78.8% for the public/not-for-profit sector, 65.4% for the private/for-profit (proprietary) sector, and 73.9% for the private/not-for-profit sector.

#### 2016 First-Time Pass Rate Data by Institutional Control

The mean first-time pass rate for the TMC Exam at the <u>high cut score</u> was 75.9% for the public/notfor-profit sector (n=315; median=80%; SD=20), 74.4% for the private/not-for-profit sector (n=33; median=80%; SD=19.6), 63.3% for the private/for-profit (proprietary) sector (n=49; median=64.1; SD=19.7), and 72.3% for the federal government (n=2). The mean number of TMC Exam first-time passers at the high cut score per program was 10 for the public/not-for-profit sector, 10 for the private/not-for-profit sector, 16 for the private/for-profit (proprietary) sector, and 58 for the federal government;

The mean first-time pass rate for the CSE Exam was 61.3% for the public/not-for-profit sector (n=300; median=60%; SD=20.2), 58.0% for the private/not-for-profit sector (n=29; median=64.7%; SD=23.6), 56% for the private/for-profit (proprietary) sector (n=48; median=58.5%; SD=20.9), and 62.4% for the federal government (n=2). The mean number of CSE Exam first-time passers per program was 7 for the public/not-for-profit sector, 6 for the private/not-for-profit sector, 12 for the private/for-profit (proprietary) sector, and 18 for the federal government.



#### **RRT Credentialing Success by Enrollment Size**

The mean RRT credentialing success for programs with annual enrollments of less than 20 students in 2015 was 71.3% (n=240). The median was 75.0% (SD = 20.6). Twenty-four programs did not report 2015 enrollments and therefore were not included in the analysis. The mean RRT credentialing success for programs with annual enrollments of 20 or greater students in 2015 was 75.8% (n=169). The median was 80.7% (SD = 18.2).

#### Programmatic Outcomes by State and Degree (including D.C.)

 Table 37 provides data on mean programmatic attrition, positive placement, CRT credentialing success, and RRT credentialing success by state, including D.C., based on 2014, 2015, and 2016 RCS data.

Table 37 -	-Progra	ammati	c Outco	omes by	State, in	cluding	D.C. for	2014 RC	S thou	gh 2016	RCS		
State (#	Mean	Program Attrition	matic		n Positive ( Placement			lean CRT tialing Su			Mean RRT Credentialing Success		
( <del>π</del> programs for 2016 RCS)	2014 RCS	2015 RCS	2016 RCS	2014 RCS	2015 RCS	2016 RCS	2014 RCS	2015 RCS	2016 RCS	2014 RCS	2015 RCS	2016 RCS	
AL (n=6)	19.3%	22.1%	22.3%	82.5%	91.2%	90.1%	86.5%	90.5%	91.2%	46.2%	54.3%	54.4%	
AR (n=12)	27.7%	29.1%	30.0%	87.7%	83.3%	77.7%	92.8%	87.0%	83.8%	66.8%	63.0%	59.4%	
AZ (n=7)	13.4%	14.3%	14.8%	73.3%	69.3%	68.3%	88.5%	85.4%	86.4%	68.8%	61.7%	63.5%	
CA (n=38)	16.2%	16.6%	16.7%	71.8%	75.2%	72.1%	90.4%	91.3%	91.3%	70.6%	74.0%	77.9%	
CO (n=4)	17.9%	14.9%	18.1%	79.8%	86.7%	89.9%	93.1%	94.2%	96.7%	77.9%	77.8%	78.2%	
CT (n=5)	16.0%	14.4%	18.7%	78.1%	83.2%	82.1%	89.4%	91.8%	93.1%	62.4%	67.9%	76.9%	
DC (n=1)	20.5%	4.0%	9.5%	57.1%	57.7%	50.0%	85.7%	73.1%	65.4%	61.9%	26.9%	46.2%	
DE (n=2)	29.7%	13.0%	29.8%	89.7%	87.5%	85.6%	97.7%	100%	100%	80.8%	72.7%	74.4%	
FL (n=25)	19.2%	19.0%	19.0%	80.4%	83.0%	78.9%	89.2%	91.2%	92.7%	70.8%	75.8%	80.1%	
GA (n=15)	19.1%	15.6%	12.0%	87.1%	87.3%	87.1%	92.6%	91.6%	90.7%	74.6%	77.8%	77.1%	
HI (n=1)	13.6%	13.3%	12.2%	87.5%	97.4%	97.3%	100%	100%	100%	100%	100%	100%	
IA (n=6)	21.2%	19.0%	18.8%	90.8%	93.5%	90.4%	92.2%	93.2%	92.8%	55.7%	59.8%	60.2%	
ID (n=3)	16.2%	9.5%	11.9%	85.8%	89.2%	86.7%	88.1%	91.7%	92.6%	63.3%	69.3%	69.6%	
IL (n=15)	18.3%	19.2%	21.8%	84.4%	85.0%	84.0%	93.2%	93.5%	95.2%	67.4%	70.6%	75.2%	
IN (n=11)	19.3%	18.5%	16.7%	93.0%	92.5%	91.9%	97.6%	96.9%	96.5%	73.4%	69.3%	69.8%	
KS (n=9)	17.1%	20.1%	19.9%	86.0%	88.8%	85.9%	89.7%	89.7%	89.3%	61.2%	68.1%	67.5%	
KY (n=13)	21.0%	21.3%	20.9%	85.4%	89.6%	91.1%	95.2%	95.1%	95.7%	53.4%	57.9%	62.4%	
LA (n=10)	18.5%	18.7%	13.8%	86.4%	89.1%	84.9%	93.9%	92.7%	90.4%	55.1%	56.7%	54.3%	
MA (n=6)	18.9%	21.2%	23.1%	90.9%	85.5%	85.3%	96.1%	93.6%	94.1%	64.1%	68.9%	73.7%	
MD (n=7)	23.5%	19.8%	17.5%	73.9%	78.5%	75.6%	89.2%	90.6%	90.6%	63.1%	67.1%	69.4%	
ME (n=2)	25.6%	18.8%	14.2%	89.8%	87.4%	89.9%	97.2%	97.1%	95.4%	71.2%	77.5%	84.9%	
MI (n=12)	19.8%	22.0%	20.5%	87.5%	85.5%	87.2%	92.0%	90.4%	93.5%	79.1%	77.1%	79.2%	
MN (n=5)	20.2%	21.2%	20.6%	89.9%	91.0%	87.0%	97.2%	96.7%	96.9%	64.8%	73.6%	70.0%	
MO (n=11)	20.8%	18.8%	20.1%	83.9%	85.0%	84.5%	93.2%	93.4%	92.4%	67.8%	73.5%	76.4%	



State (#	Mean	Program Attrition	matic		) Positive ( Placement	Job)		lean CRT tialing Su	ccess		Mean RRT ntialing Su	
programs for 2016 RCS)	2014 RCS	2015 RCS	2016 RCS	2014 RCS	2015 RCS	2016 RCS	2014 RCS	2015 RCS	2016 RCS	2014 RCS	2015 RCS	2016 RCS
MS (n=8)	16.5%	17.5%	21.8%	91.1%	90.7%	90.3%	91.8%	90.4%	91.6%	51.9%	53.2%	52.3%
MT (n=2)	16.9%	15.0%	12.5%	85.1%	89.8%	96.9%	96.0%	100%	100%	70.9%	76.5%	80.7%
NC (n=14)	25.0%	25.5%	27.3%	85.5%	83.5%	83.0%	94.5%	94.7%	93.5%	74.8%	76.0%	79.6%
ND (n=3)	3.2%	4.4%	3.7%	98.9%	99.0%	97.7%	97.1%	99.0%	100%	89.0%	91.7%	95.1%
NE (n=4)	17.9%	19.0%	17.3%	94.9%	96.6%	97.0%	99.0%	99.6%	97.0%	73.0%	78.1%	83.6%
NH (n=1)	10.7%	9.4%	18.9%	83.3%	84.0%	82.6%	86.7%	88.0%	87.0%	63.3%	68.0%	52.2%
NJ (n=7)	12.9%	13.3%	11.5%	80.6%	84.4%	81.9%	91.4%	93.6%	90.9%	71.1%	75.6%	75.0%
NM (n=6)	22.3%	19.1%	19.5%	81.4%	84.4%	85.4%	86.9%	89.1%	91.6%	69.1%	73.5%	74.0%
NV (n=3)	25.3%	21.1%	16.4%	81.1%	85.3%	86.7%	94.0%	95.5%	97.4%	70.3%	80.5%	84.6%
NY (n=4)	18.8%	18.9%	17.6%	92.9%	81.4%	81.2%	94.0%	93.4%	94.1%	83.1%	82.3%	84.8%
OH (n=22)	20.4%	19.9%	18.1%	83.3%	84.0%	82.2%	94.8%	94.0%	93.0%	72.5%	74.3%	78.2%
OK (n=7)	13.2%	18.3%	18.6%	89.9%	87.5%	89.3%	94.5%	89.8%	90.8%	52.0%	55.7%	57.7%
OR (n=4)	12.5%	11.5%	9.2%	89.3%	88.7%	86.6%	95.8%	96.2%	94.0%	73.0%	78.4%	81.2%
PA (n=25)	18.5%	17.9%	15.5%	89.5%	87.1%	80.2%	92.7%	90.4%	91.7%	59.7%	60.3%	63.0%
RI (n=2)	14.9%	16.0%	18.2%	67.5%	79.3%	78.6%	88.0%	85.9%	85.5%	44.3%	41.0%	45.6%
SC (n=7)	33.3%	31.4%	29.9%	92.5%	93.3%	94.1%	97.0%	97.8%	97.5%	75.3%	82.9%	86.0%
SD (n=2)	25.8%	25.0%	16.5%	91.1%	88.4%	84.3%	100%	94.1%	92.3%	92.6%	84.0%	86.8%
TN (n=10)	20.9%	18.9%	22.1%	89.0%	87.3%	84.9%	93.6%	92.5%	94.9%	74.0%	73.2%	74.2%
TX (n=36)	16.9%	17.5%	16.9%	87.7%	87.9%	86.1%	90.9%	91.6%	91.5%	65.6%	69.2%	70.3%
UT (n=7)	11.4%	13.5%	9.4%	87.4%	91.1%	76.2%	88.3%	90.8%	89.8%	66.2%	72.3%	75.4%
VA (n=8)	27.9%	24.2%	22.6%	84.4%	87.6%	84.4%	86.2%	95.3%	95.8%	76.9%	81.4%	80.7%
VT (n=1)	27.7%	31.1%	26.8%	89.5%	87.8%	87.9%	89.5%	90.2%	93.9%	78.9%	80.5%	78.8%
WA (n=5)	15.4%	18.0%	17.2%	87.6%	90.6%	91.1%	96.0%	96.8%	97.6%	75.9%	79.3%	82.9%
WI (n=7)	20.1%	14.6%	16.2%	88.1%	87.5%	90.2%	95.1%	96.0%	97.0%	72.0%	73.0%	75.0%
WV (n=6)	15.0%	19.1%	20.3%	78.9%	81.8%	72.5%	78.1%	79.0%	80.6%	40.7%	51.0%	57.0%
WY (n=1)	34.2%	36.4%	36.1%	88.0%	88.9%	92.0%	92.0%	92.6%	100%	88.0%	92.6%	100%



#### **Overall Graduate Satisfaction**

The CoARC evaluates overall graduate satisfaction based on a CoARC developed survey which uses a 5-point Likert scale. Programs administer the survey to employed program graduates six (6) to twelve (12) months after graduation. The CoARC-established threshold for this outcome is 80%, meaning that, for the question specifically assessing the subject, 80% of returned graduate surveys must rate overall satisfaction at 3 or higher on a 5-point Likert scale. A copy of the survey template can be accessed at http://www.coarc.com/43.html.

Table 38 – RC Overall Graduate Satisfaction for 2016 RCS								
Reporting Years (# of programs submitting)	Mean (SD)	Maximum Value	Minimum Value	CoARC Threshold	# of Programs Below Threshold			
2016 RCS Data from 1/1/13 to 12/31/15 (N=433)	98.7% (8.6)	100%	0%	80%	3			

2016 RCS results (**Table 38**) includes data on overall graduate satisfaction from 433 programs. Five programs did not have any data to report. Mean overall graduate satisfaction was 98.7%, with the highest value of 100% (n=382) and the lowest value of 0% (n=3). The median was 100%. Results from 3 programs (0.7% of total) were below the <u>CoARC-established threshold</u>. As per CoARC Standard 3.11, these programs began a dialogue with the CoARC to develop an appropriate plan of action (i.e., a <u>progress report</u>) for program improvement.

Not included in **Table 38** are the data from the 2016 RCS regarding overall graduate satisfaction data for the 7 sleep specialist program options. All programs achieved 100% overall graduate satisfaction.

Table 39 – RC Overall Graduate Satisfaction by Degree Offered for 2016 RCS							
Degree Offered (N=433)	Associate (n=369)	Baccalaureate (n=60)	Master's (n=4)				
2016 RCS Mean Overall Graduate Satisfaction (# of programs below CoARC threshold)	98.5% (3)	99.4%	100%				

#### Overall Graduate Satisfaction by Degree Offered, Institutional Type, and Institutional Control/Funding

**Table 39** compares 2016 RCS data regarding overall graduate satisfaction data in relation to the degree offered. Programs offering the master's degree had the highest mean overall graduate satisfaction (100%) while programs offering the associate degree had the lowest (98.5%). The median overall graduate satisfaction was 100% for associate, baccalaureate, and master's programs. All three programs below the CoARC threshold of 80% offered the AAS degree.



Table 40 – RC Overall Graduate Satisfaction by Institutional Type for 2016 RCS									
Institutional Type (N=433)	Four-Year College or University (n=97)	Career or Technical College (n=9)	Community or Junior College (n=248)	Academic HSC/Medical Center (n=13)	Technical or Vocational School (n=64)	U.S. Military (n=2)			
2016 RCS Mean Overall Graduate Satisfaction (# of programs below CoARC threshold)	99.5%	99.2%	98.1% <mark>(3)</mark>	99.0%	99.4%	98.6%			

**Table 40** compares 2016 RCS data regarding overall graduate satisfaction in relation to institutional type. Programs located in Four-Year Colleges or Universities showed the highest mean overall graduate satisfaction (99.5%). Programs located in Community or Junior Colleges showed the lowest mean overall graduate satisfaction of 98.1%. The median overall graduate satisfaction was 100% for all categories; this assessment modality was determined not to apply to the U.S. Military.

All three programs below the CoARC threshold of 80% were located at a Community or Junior College.

Table 41 – RC Overall Graduate Satisfaction by Institutional Control/Funding for 2016 RCS									
Institutional Control/Funding (N=433)	Public/Not-For- Profit (n=345)	Private/For-Profit (Proprietary) (n=51)	Private/Not-For- Profit (n=35)	Federal Government (n=2)					
2016 RCS Mean Overall Graduate Satisfaction (# of programs below CoARC threshold)	98.5% <mark>(3)</mark>	99.1%	99.5%	98.6%					

**Table 41** compares 2016 RCS data regarding overall graduate satisfaction data in relation to institutional control/funding. Programs controlled/funded by private/not-for-profit institutions had the highest mean overall graduate satisfaction, at 99.5%. Programs controlled/funded by public/not-for-profit institutions had the lowest mean overall graduate satisfaction at 98.5%. The median overall graduate satisfaction was 100% for all categories; this assessment modality doesn't apply to the federal government.

All three programs below the CoARC threshold of 80% were controlled/funded by Public/Not-For-Profit institutions.



#### **Overall Employer Satisfaction**

The CoARC evaluates overall employer satisfaction based on a CoARC-developed survey which uses a 5-point Likert scale. Programs administer the survey to employers of their graduates six (6) to twelve (12) months after graduation. The CoARC-established threshold for this outcome is 80%, meaning that, for the question specifically assessing this subject, 80% of returned surveys must rate overall employer satisfaction with program graduates at 3 or higher on a 5-point Likert scale. A copy of the survey template can be accessed at <a href="http://www.coarc.com/43.html">http://www.coarc.com/43.html</a>.

Table 42 – RC Overall Employer Satisfaction for 2016 RCS								
Reporting Years (# of programs submitting)Mean (SD)Maximum ValueMinimum ValueCoARC Threshold# of Program Below Threshold								
2016 RCS Data from 1/1/13 to 12/31/15 (N=433)	97.8% (109)	100%	0%	80%	5			

2016 RCS results on overall employer satisfaction (**Table 42**) include data from 433 programs. Five programs did not have any data to report. The mean overall employer satisfaction was 97.8%, with the highest value of 100% (n=341) and the lowest value of 0% (n=5). The median overall employer satisfaction was 100%. Five programs (1.2% of total) reported overall employer satisfaction below the <u>CoARC-established threshold</u> of 80%. As per CoARC Standard 3.11, these programs began a dialogue with the CoARC to develop an appropriate plan of action (i.e., a <u>progress report</u>) for program improvement.

Not included in **Table 42** are the data from the 2016 RCS regarding overall employer satisfaction data for the 7 sleep specialist program options. All programs achieved 100% overall employer satisfaction.

#### Overall Employer Satisfaction by Degree Offered, Institutional Type, and Institutional Control/Funding

Table 43 – RC Overall Employer Satisfaction by Degree Offered for 2016 RCS							
Degree Offered (N=433)Associate (n=369)Baccalaureate (n=60)Master's (n=4)							
2016 RCS Mean Overall Employer Satisfaction (# of programs below CoARC threshold)	98.5% (5)	99.4%	92.5%				

**Table 43** includes data from the 2016 RCS that assesses overall employer satisfaction data in relation to the degree offered. Programs offering the baccalaureate degree had the highest mean overall employer satisfaction (99.4%) while programs offering the master's degree had the lowest (92.5%). The median overall employer satisfaction was 100% for associate and baccalaureate programs, and 97.5% for master's programs. Four of the five programs below the CoARC threshold of 80% offered the AAS degree and 1 program offered the AS degree.



Table 44 – RC Overall Employer Satisfaction by Institutional Type for 2016 RCS									
Institutional Type (N=433)	Four-Year College or University (n=97)	Career or Technical College (n=9)	Community or Junior College (n=248)	Academic HSC/Medical Center (n=13)	Technical or Vocational School (n=64)	U.S. Military (n=2)			
2016 RCS Mean Overall Employer Satisfaction (# of programs below CoARC threshold)	98.8%	97.6%	97.4% <mark>(4)</mark>	99.5%	97.5% <mark>(1)</mark>	96.6%			

**Table 44** uses data from the 2016 RCS to compare overall employer satisfaction data in relation to institutional type. Programs located in Academic HSC/Medical Centers showed the highest mean overall employer satisfaction (99.5%). Programs located in the U.S. Military showed the lowest mean overall employer satisfaction of 96.6%. The median overall employer satisfaction was 100% for all categories; this assessment modality doesn't apply to the U.S. Military. The one program below the CoARC threshold of 80% was located at a Four-Year College or University.

Table 45 – RC Overall Employer Satisfaction by Institutional Control/Funding for 2016 RCS									
Institutional Control/Funding (N=433)	Public/Not-For- Profit (n=345)	Private/For-Profit (Proprietary) (n=51)	Private/Not-For- Profit (n=35)	Federal Government (n=2)					
2016 RCS Mean Overall Employer Satisfaction (# of programs below CoARC threshold)	97.6% <mark>(5)</mark>	99.3%	98.1%	96.6%					

**Table 45** uses 2016 RCS data to compare overall employer satisfaction data in relation to institutional control/funding. Programs controlled/funded by private/for-profit (proprietary) institutions had the highest mean overall employer satisfaction, at 99.3%. Programs controlled/funded by the federal government had the lowest mean overall employer satisfaction at 96.6%. The median employer satisfaction was 100% for all categories; this assessment modality doesn't apply to the federal government. All five programs below the CoARC threshold of 80% were controlled/funded by a Public/Not-For-Profit institution.



#### **On-Time Graduation Rate**

The CoARC defines on-time graduation as the number of students who graduate with their enrollment cohort (i.e., within thirty (30) days of their expected graduation date) divided by the total number of students in that cohort who graduated. The enrollment date and the expected graduation date of each cohort are specified by the program. The CoARC established threshold for this outcome is 70%.

Table 46 – RC On-Time Graduation Rate for 2016 RCS								
Reporting Years (# of programs submitting)	Mean (SD)	Maximum Value	Minimum Value	CoARC Threshold	# of Programs Below Threshold			
2016 RCS Data from 1/1/13 to 12/31/15 (N=433)	91.0% (10.4)	100%	7.7%	70%	13			

2016 RCS data for on-time graduation rate (**Table 46**) show a total of 433 programs reporting. Five programs did not have any on-time graduation rate data to report. The mean on-time graduation rate was 91.0% with the highest value of 100% (n=85) and the lowest value of 7.7% (n=1). The median on-time graduation rate was 93.8%. A total of 13 programs (3.0% of total) reported on-time graduation rates below the <u>CoARC-established threshold</u> of 70%. As per CoARC Standard 3.11, these programs began a dialogue with the CoARC to develop an appropriate plan of action (i.e., a <u>progress report</u>) for program improvement.

Not included in **Table 46** are data from the 2016 RCS regarding the on-time graduation rates for the 7 sleep specialist program options. All programs achieved 100% on-time graduation.

Table 47 – RC On-Time Graduation Rate by Degree Offered for 2016 RCS							
Degree Offered (N=433)Associate (n=369)Baccalaureate (n=60)Master's (n=4)							
2016 RCS Mean On-Time Graduation Rate (# of programs below CoARC threshold)	90.8% (12)	91.7% <mark>(1)</mark>	92.6%				

**Table 47** uses data from the 2015 RCS to compare on-time graduation rate data in relation to the degree offered. Programs offering the associate degree had the highest mean on-time graduation rate (90.5%) while programs offering the master's degree had the lowest (80.7%). The median on-time graduation rate was 93.8% for associate programs, 94.3% for baccalaureate programs, and 96.5% for master's programs. Twelve of the programs below the CoARC threshold of 70% offered the associate degree (7 AS, 1 AOS, 4 AAS). One offered the baccalaureate degree.



Table 48 – RC O	Table 48 – RC On-Time Graduation Rate by Institutional Type for 2016 RCS									
Institutional Type (N=433)	Four-Year College or University (n=97)	Career or Technical College (n=9)	Community or Junior College (n=248)	Academic HSC/Medical Center (n=13)	Technical or Vocational School (n=64)	U.S. Military (n=2)				
2016 RCS Mean On-Time Graduation Rate (# of programs below CoARC threshold)	90.1% <mark>(4)</mark>	85.4% <mark>(1)</mark>	92.6% <mark>(2)</mark>	92.8%	87.3% <mark>(5)</mark>	55.1% <mark>(1)</mark>				

**Table 48** uses data from the 2015 RCS to compare on-time graduation rate data in relation to institutional type. Programs located in Community or Junior Colleges showed the highest mean on-time graduation rate of 92.3%. Programs located in the U.S. Military showed the lowest mean on-time graduation rate of 55.3%. The median on-time graduation rate was 93.5% for Four-Year Colleges or Universities, 89.4% for Career or Technical Colleges, 94.3% for Community or Junior Colleges, 92.8% for Academic HSC/Medical Centers, and 88.9% for Technical or Vocational Schools.

Four of the 13 programs below the CoARC threshold of 70% were located at Four-Year Colleges or Universities, five were at Technical or Vocational Schools, two at Community or Junior Colleges, one was at a Career or Technical College, and the remaining one was in the U.S. Military.

Table 49 – RC On-Time Graduation Rate by Institutional Control/Funding for 2016 RCS							
Institutional Public/Not-For- Control/Funding (n=345) Private/For-Profit (Proprietary) Profit (n=35) Federal Government (n=2)							
2016 RCS Mean On-Time Graduation Rate (# of programs below CoARC threshold)	92.8% <mark>(4)</mark>	84.2% <mark>(5)</mark>	84.9% <mark>(3)</mark>	55.1% <mark>(1)</mark>			

**Table 49** uses data from the 2016 RCS to compare on-time graduation rate data in relation to institutional control/funding for the 2016 RCS. Programs controlled/funded by public/not-for-profit institutions showed the highest mean on-time graduation rate, at 92.8%. Programs controlled/funded by the federal government showed the lowest mean on-time graduation rate at 55.1%. The median on-time graduation rate was 94.3% for public/not-for-profit institutions, 85.3% for private/for-profit (proprietary) institutions, and 88.9% for private/not-for-profit institutions.

Four of the 13 programs below the CoARC threshold of 70% were controlled/funded by public/not-forprofit institutions, three by private/not-for-profit institutions, five by private/for-profit (proprietary) institutions, and one by the federal government.



### PROGRAMMATIC DATA RELATED TO THE AARC 2015 AND BEYOND PROJECT

This intent of this section is to provide the CoARC's communities of interest with additional programmatic data related to the American Association for Respiratory Care's (AARC's) <u>2015 and Beyond</u> project. These data should be particularly useful in addressing the following issues: (1) Maintaining an adequate respiratory therapy workforce; (2) Increasing access to baccalaureate degrees for respiratory therapy students enrolled in associate degree granting programs; and (3) Helping associate degree programs that wish to align with bachelor degree granting institutions develop consortial and/or cooperative agreements.

#### Baccalaureate Degree Eligibility Categories

Table 50 – Baccalaureate Degree Eligibility-Number of Programs for 2013 (N=441), 2014	
(N=438), 2015 (N=427), and 2016 (N=428)	

<b>V</b>								
	Baccalaureate Degree Eligibility Category	# of Programs as of 12/31/13	# of Programs as of 12/31/14	# of Programs as of 12/31/15	# of Programs as of 12/31/16			
Ι.	Sponsoring institution offers a baccalaureate degree RC program	60	64	65	69			
11.	Sponsoring institution offers baccalaureate degrees in other disciplines	86	86	88	87			
111.	Sponsoring institution located in a state that authorizes community colleges to award bachelor's degrees under certain circumstances <sup>5</sup>	77	86	108	106			
IV.	Sponsoring institution cannot offer a baccalaureate degree	218	202	166	166			

 Table 50 assigns RC programs and satellite options, based on data from the end of each year

 December 31, 2013 - 2016 to one of four baccalaureate degree eligibility categories.

Category I includes sponsoring institutions that offer an Entry into RC Professional Practice baccalaureate degree or higher upon graduation. As of 12/31/2016, 69 of the 428 (16.1% of total) RC programs and satellites fall under Category I.

Category II includes sponsoring institutions that can offer both the associate degree and baccalaureate degree or can transition their associate degree to a baccalaureate degree. As of 12/31/2016, 87 (20.3% of total) RC programs and satellites fall under Category II. As mentioned earlier in this report, 45 of the RC programs and satellites in this category are currently associate degree programs located at a 4-Year College or University.

Category III includes sponsoring institutions offering an Entry into RC Professional Practice associate degree upon graduation, that are located in states that authorize community colleges to award bachelor's degrees under certain circumstances. According to the Community College Baccalaureate Association, 21 states have legislation allowing community colleges to award bachelor's degrees. The 106 sponsoring

<sup>&</sup>lt;sup>5</sup> Source: Community College Baccalaureate Association http://www.accbd.org/resources/baccalaureate-conferring-locations/?ct=US



institutions in this category may have the capability of offering both the associate degree and baccalaureate degree or may be able to transition their associate degree to a baccalaureate degree. However, because of differences in the applicable legislation the extent of this capability varies greatly from state to state. As of 12/31/2016, 106 of the 428 (24.8% of total) RC programs and satellites fall under Category III.

Category IV includes sponsoring institutions offering an Entry into RC Professional Practice associate degree upon graduation that do not have the authority to award a baccalaureate degree. However, depending on applicable state rules and regulations, sponsoring institutions in this category may be capable of articulating with, or participating in a consortial partnership with, a 4-year degree-granting institution. As of 12/31/2016, 166 of the 428 (38.8% of total) RC programs and satellites fall under Category IV.

#### Baccalaureate Degree Eligibility – Enrollment Capacity and Graduation Rates

Table 51 – Baccalaureate Degree Eligibility- Enrollment Capacity and Graduates for 2014 (N=438), 2015 (N=427), and 2016 (N=428)									
Baccalaureate Degree Eligibility Category	Maximum Enrollment Capacity as of 12/31/13	Total Graduates as of 12/31/13	Maximum Enrollment Capacity as of 12/31/14	Total Graduates as of 12/31/14	Maximum Enrollment Capacity as of 12/31/15	Total Graduates as of 12/31/15			
I. Sponsoring institution currently offers a baccalaureate degree RC program	1,478	790	1,310	693	1,641	837			
II. Sponsoring institution offers baccalaureate degrees in other disciplines	3,308	1,954	3,342	1,232	3,405	1,634			
III. Sponsoring institution located in a state that authorizes community colleges to award bachelor's degrees under certain circumstances <sup>7</sup>	2,183	1,272	3,049	1,577	3,050	1,707			
IV. Sponsoring institution cannot offer a baccalaureate degree	6,477	3,691	5,274	2,417	5,253	2,715			

 Table 51 provides an assessment of the maximum annual enrollment capacity and the total number of graduates for each year (December 31, 2013-2015) based on assignment of RC programs and satellite options to these four baccalaureate degree eligibility categories

As of December 31, 2015, the 69 programs in Category I produced 837 graduates (12.1% of the total of the 6,893 graduates from all 4 categories in 2015); this was 51.0% of maximum enrollment capacity for this category. The 87 programs in Category II produced 1,634 graduates (23.7% of the total of the 6,893 graduates), which was 48.0% of maximum enrollment capacity for this category. The number of baccalaureate degree graduates has the potential to increase by approximately 195% (or to 2,471 graduates per year) if all sponsoring institutions in Category II converted their associate degree RC program to a baccalaureate degree.

The 106 programs in Category III produced 1,707 graduates (24.8% the total of the 6,893 graduates), which was 56.0% of maximum enrollment capacity for this category. The 166 programs in Category IV



produced 2,715 graduates (39.4% of the total of the 6,893 graduates), which was 51.7% of maximum enrollment capacity for this category.

#### Baccalaureate Degree Eligibility by State (including District of Columbia and Puerto Rico)

**Table 52** provides a comparison of baccalaureate degree eligibility categories by state, excluding Alaska which does not have any accredited RC programs. Included for each state are: the number of programs in each of the four categories; and the maximum annual enrollment capacity for each category. Twenty-nine states have programs that fall under Category I; thirty states have programs that fall under Category II. Eleven states, including the District of Columbia, do not have a program in either Category I or II. Ten states (highlighted), including the District of Columbia, have programs that only fall under Category IV. One state (Hawaii) has only one, Category III program.

Table 52 – Baccalaureate Degree Eligibility by State and District of Columbia								
	Category I		Category II		Category III		Category IV	
# of Programs as of 12/31/16 (N=428)	# of Programs as of 12/31/16	Max Enroll Capacity						
Alabama (n=8)	4	106	1	50	0	0	3	105
Arkansas (n=8)	1	24	0	0	6	112	1	24
Arizona (n=6)	0	0	2	141	0	0	4	232
California (n=38)	1	22	7	419	21	859	9	852
Colorado (n=4)	0	0	1	72	1	35	2	120
Connecticut (n=5)	1	18	1	40	0	0	3	60
Dist of Columbia (n=1)	0	0	0	0	0	0	1	24
Delaware (n=2)	0	0	0	0	0	0	2	35
Florida (n=25)	2	55	18	517	2	51	3	114
Georgia (n=14)	4	147	4	115	6	109	0	0
Hawaii (n=1)	0	0	0	0	1	16	0	0
lowa (n=6)	0	0	1	14	0	0	5	109
ldaho (n=3)	1	25	2	55	0	0	0	0
Illinois (n=15)	2	48	3	96	0	0	10	279
Indiana (n=11)	1	30	1	16	9	189	0	0
Kansas (n=9)	1	24	2	38	0	0	6	130
Kentucky (n=15)	3	45	0	0	0	0	12	241
Louisiana (n=9)	2	27	2	70	5	86	0	0
Massachusetts (n=6)	0	0	0	0	0	0	6	124
Maryland (n=6)	1	40	0	0	0	0	5	113



<b>"</b> • ( <b>D</b>	Category I		Category II		Category III		Category IV	
# of Programs as of 12/31/16 (N=428)	# of Programs as of 12/31/16	Max Enroll Capacity						
Maine (n=2)	0	0	0	0	0	0	2	34
Michigan (n=12)	0	0	2	74	10	253	0	0
Minnesota (n=5)	2	40	0	0	3	83	0	0
Missouri (n=9)	2	24	3	92	0	0	4	171
Mississippi (n=8)	0	0	0	0	0	0	8	162
Montana (n=2)	0	0	1	16	0	0	1	15
North Carolina (n=14)	0	0	0	0	0	0	14	300
North Dakota (n=3)	3	36	0	0	0	0	0	0
Nebraska (n=4)	1	15	1	24	0	0	2	59
New Hampshire (n=1)	0	0	0	0	0	0	1	16
New Jersey (n=7)	2	72	2	72	0	0	3	130
New Mexico (n=6)	0	0	1	72	5	107	0	0
Nevada (n=3)	0	0	2	115	0	0	1	72
New York (n=13)	3	74	1	30	9	356	0	0
Ohio (n=22)	5	116	5	124	0	0	12	343
Oklahoma (n=6)	0	0	2	37	2	54	2	58
Oregon (n=4)	1	25	0	0	0	0	3	94
Pennsylvania (n=24)	6	118	8	175	0	0	10	376
Puerto Rico (n=1)	1	40	0	0	0	0	0	0
Rhode Island (n=2)	0	0	1	40	0	0	1	24
South Carolina (n=8)	0	0	0	0	0	0	8	177
South Dakota (n=2)	0	0	2	24	0	0	0	0
Tennessee (n=9)	3	59	0	0	0	0	6	238
Texas (n=36)	6	173	6	366	22	644	2	72
Utah (n=7)	4	102	3	426	0	0	0	0
Virginia (n=8)	3	78	0	0	0	0	5	155
Vermont (n=1)	0	0	1	27	0	0	0	0
Washington (n=5)	1	28	1	48	3	76	0	0
Wisconsin (n=7)	0	0	0	0	0	0	7	155
West Virginia (n=4)	2	30	0	0	1	20	1	25
Wyoming (n=1)	0	0	0	0	0	0	1	15



#### **RC Program Consortia**

In its accreditation *Standards*, the CoARC defines a consortium as "a legally binding contractual partnership of two or more sponsoring institutions (at least one of which is a duly accredited degree-granting institution of higher education) that come together to offer a program. Consortia must be structured to recognize and perform the responsibilities and functions of a sponsoring institution." CoARC Entry Standard 1.02 and DA Standard 1.2 state that "the responsibilities of the consortium and of each member must be clearly documented in a formal affiliation agreement or memorandum of understanding, which delineates instruction, supervision of students, resources, reporting, governance and lines of authority." **Table 53** provides a listing of 37 consortium programs as of December 31, 2016 according to the CoARC's database.

Table 53 – RC Program Consortia as of December 31, 2016								
Program #	Consortium Name	City	State	Degree				
200014	Millersville University	Millersville	PA	BS				
200019	Mansfield University	Mansfield	PA	AAS				
200039	Indiana Respiratory Therapy Ed Consortium	Indianapolis	IN	BS				
200078	Indiana University of PA/West Penn Hospital	Pittsburgh	PA	BS				
200088	Delaware Co CC/Crozer-Chester Med Ctr.	Upland	PA	AAS				
200090	Norwalk Community College	Norwalk	СТ	AS				
200102	East Los Angeles College/Santa Monica	Monterey Park	CA	AS				
200133/220133	St. Alexius Medical Center/University of Mary	Bismarck	ND	BS/MS				
200138	Hudson Valley Community College	Troy	NY	AAS				
200143	CHI Health/Midland University	Omaha	NE	BS				
200172	Mayo Clinic College of Medicine School	Rochester	MN	BS				
200260	Cincinnati State Tech-Community College	Cincinnati	OH	AAS				
200299	Delaware Technical and Community College	Wilmington	DE	AAS				
200313	West Chester University/Bryn Mawr Hospital	Bryn Mawr	PA	BS				
200341/210341	Rutgers & State University of NJ	Stratford	NJ	AAS/BS				
200347/210347	Rutgers & State University of NJ	Newark	NJ	AS/BS				
200367	North Dakota State University/Sanford	Fargo	ND	BS				
200392	Bossier Parish Community College	Bossier City	LA	AAS				
200397	Frederick Community College	Frederick	MD	AAS				
200430	Carver Career Center/Bridge Valley CTC	Charleston	WV	AS				
200431	Pickens Technical College	Aurora	СО	AAS				
200432	Missouri Southern State University	Joplin	MO	AS				
200450	Collins Career Technical Center	Chesapeake	OH	AAS				
200454	Francis Tuttle	Oklahoma City	OK	AS				
200461	Northeast Kentucky Consortium	Morehead	KY	AAS				
200463	Autry Technology Ctr/Northern OK College	Enid	OK	AAS				
200490	Stevens-Henager College	Salt Lake City	UT	AAS				



200497	Cape Girardeau Career & Technology Center	Cape Girardeau	MO	AS
200504	University of Rio Grande/Rio Grande CC	Rio Grande	OH	AS
200506	Marshall University/St. Mary's Med Ctr.	Huntington	WV	BS
200569	Ivy Tech E. IN Resp. Care Ed. Consortium	New Castle	IN	AS
200585	US Army Med Ed & Training Campus	Fort Sam Houston	ΤХ	AAS
200586	Simi Valley Adult School/Excelsior	Simi Valley	CA	AS
200595	Missouri State University-West Plains	West Plains	MO	AAS
200600	Sullivan Respiratory Care Consortium	Loch Sheldrake	NY	AAS
210273	York College of PA	York	PA	BS
300025	Monroe City Hall Annex	West Monroe	LA	AAS

Inquiries regarding this report should be addressed to:

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