

## **Respiratory Care**

**Program Review** 

A Process for

Self-Evaluation

and

**Continued Improvement** 

# Respiratory Care Program

## **Program Review**

Program Review Team Lead: Joseph Goss, Amy Ceconi, Kelly Horgan

Report Date May 1, 2016

Period of Years Being Reviewed 2011 to 2015

## Table of Contents

Program Review
Program Review Team
Report Date2
Period of Years Being Reviewed2
Overview
Program Mission and Vision Statement6
Alignment of College Mission, Program Mission, and Goals6
Summary of Significant Developments since Last Program Review7
Bergen Community College: Vision, Mission and Values8
Vision
Mission
Values
Focus on Students9
Demographics9
Enrollment9
Special Populations
Physical Standards10
Attitudinal / Mental Standards11
Student Satisfaction
C.I.E. Data
Program Data
Learning Outcomes Assessments
Student Success
Employers Survey
Data Needs29
Focus on Faculty and Staff
Demographics
Faculty Profiles
Professional Activities

College Activities	
Professional Activities	
Publications and Presentations	
Adjunct Faculty	
Hiring	
Coordination and Communication	
Support	
Staff	
Administrative Assistant Support	
Other Support	
Data Needs	
Focus on Curriculum	
Summary of Program Curriculum	
Curricular Issues	
Lead-in Courses	
Follow-up Courses	
Scheduling	
Assessment	
Innovations or Changes in Last Five Years	
Data Needs	40
Focus on Support	41
Technology	41
Facilities and Equipment	42
Learning Resources	42
Sidney Silverman Library	42
Center for Innovation in Teaching and Learning (CITL)	43
Respiratory Care: Continuing Education	43
Adjunct Faculty Development	43
Marketing and Public Relations	43
Support Services	44

Tutoring	44
Career Development	44
Program Laboratory	44
Resources, Budget	45
Staffing	45
Operating and Capital Budgets	45
Grants	45
Data Needs	45
Focus on Community	46
Community Groups	46
Community	46
Community Issues Related to Program	46
Funding	47
Student Funding Support	47
Program Funding Support	47
External Requirements or Considerations	47
Accreditations	47
Licensure	48
Professional Organization	48
Advisory Committee	48
Data Needs	49
Summary	50
Program Achievements, Progress Made Since Last Review	50
Mission / Goals / Objectives	50
Strengths	50
Challenges	51
Celebration and Recognition	51
Recommendations for Change	51
Action Plan	52

## Overview

## **Program Mission and Vision Statement**

As a leading Community College in the nation, the College creates a stimulating, rigorous, and inclusive learning environment. The Bergen Community College Mission and Vision statements serve as a general guide for the activities and direction of the Respiratory Care Program.

The Respiratory Care Program (Program) represents just one of many accessible, affordable, high-quality degree programs offered by the College. Using innovative technology and enhanced learning experiences, students graduate having evidenced the cognitive, psychomotor, and affective skills expected of advanced level respiratory therapists. These Program goals are accomplished in a challenging academic environment that fosters civility and respect. The Program provides an immediate career path for graduates and at the same time fulfill the respiratory care employment needs of the densely populated Bergen County area.

In addition, the Program responds to community needs through its Service Learning initiatives and lifelong learning opportunities in continuing education activities.

The Program serves a very widely diverse student population. This is reflective of the community served and more importantly, has brought to our curriculum the incorporation of the diversity of ways in which culture influences health care beliefs and practices.

To 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 (RRT's).

Bergen Community College offers much high quality, relevant educational and health-service career programs to high school graduates and adult learners in the community. The Department goals are related in preparing students for graduation from an accredited degree program, enabling them to obtain employment and to developing a commitment to the community. The program of learning is consistent with the standards and requirements set forth by the Commission of Accreditation for Respiratory Care (CoARC). The Associate in Applied Science degree provides career preparation, however, it is recognized that rapidly changing technology necessitates continuing professional growth. The respiratory care educator is responsible for creating an environment conducive to learning which includes receptivity to open exchange and the acceptance of students as members of the respiratory care team. Both full time and adjunct faculty serve as role models for those entering the profession and provide planned learning experiences. Many of our faculty both full-time and adjuncts are alumni of the College.

## Alignment of College Mission, Program Mission, and Goals

The Program mission statement aligns to the mission of Bergen Community College. Each goal has learning outcomes that are measured and assessed annually. All Program data is reported to the

external accreditor; CoARC annually and is on the Program web page for transparency for the community.

## Summary of Significant Developments since Last Program Review

The Program prides itself upon having up to date curriculum and state of the art equipment and new laboratory since January 2011. The Program's last accreditation site visit was March 2011 and was granted a ten-year accreditation until the next site visit date of 2021.

Since the last external accreditation site visit, the Program:

- Revised the curriculum to decrease the total credits to 65.
- Revised several courses in the curriculum so they are current with all respiratory care procedures in the workforce and reflect the new exam content of the National Board for Respiratory Care (NBRC) Program exit exams.
- Revised the clinical simulation and therapist multiple choice exam preparation programs that both faculty and students are using to be prepared for the Program exit exams and national board exams upon graduation.
- Added clinical simulation learning into the course RSP-226 Summer Clinical Externship for all students to participate in simulation learning experiences.
- The Program continues to write grant proposals and obtain funding for new technology on an annual basis. The laboratory reflects this new state of the art equipment that is concurrent with the technology utilized in our thirteen clinical sites.
- All faculties utilize the Moodle online system to support their coursework and to administer all exams/quizzes.
- The Program exit exams are all computer based and students are monitored for these exams.
- June 2016 the new Health Professions Integrated Learning Center will be completed and ready for the Program to move.

## Bergen Community College: Vision, Mission and Values

## Vision

As a college of choice, Bergen Community College provides a comfort level that enables students of all abilities to mature as learners and engaged citizens. A leading community college in the nation, the College creates a stimulating, rigorous, and inclusive learning environment. Use of innovative technology enhances learning experiences and widens access to learning media. Community and business leaders value the College as a reliable partner and principal provider of workforce development. Bergen County residents of all ages and cultural backgrounds appreciate the College as the hub of their educational and cultural activities.

## Mission

Bergen Community College educates a diverse student population in a supportive and challenging academic environment that fosters civility and respect. The College offers a comprehensive set of accessible, affordable, high-quality credit and non-credit courses, as well as degree and non-degree programs. Bergen provides lifelong learning opportunities for all members of the community. The College responds to community needs through workforce training and continuing education, and by developing programs for employers.

## Values

To fulfill the vision and mission of Bergen Community College, we are committed to:

- Integrity,
- student success,
- academic and institutional excellence,
- lifelong learning,
- respect,
- accountability, and
- innovation.

These core values will guide our daily endeavors.

## Focus on Students

## Demographics

As provided by the Center for Institutional Effectiveness, the data below reflects the recent information available. As the Commission on Accreditation for Respiratory Care (CoARC) does not require reporting demographic data, comparative information is not available. Data on enrollment and graduation rates are reported as part of the CoARC Annual Report and is provided. While the Program follows an open application process, there are certain physical and mental demands.

#### Enrollment

	Fall 2011		Fall 2012	2	Fall 2013		Fall 2014	1
	#	%	#	%	#	%	#	%
Am. Indian/Alaska Native	0	0	0	0	0	0	0	0
Asian	24	0.36	29	0.43	23	0.37	13	0.29
Black/African American	7	0.11	8	0.12	7	0.11	6	0.13
Hawaiian/Pacific Islander	1	0.02	1	0.02	0	0	1	0.02
Hispanic, all races	13	0.2	10	0.15	9	0.15	4	0.09
Two or more races	1	0.02	3	0.04	2	0.03	1	0.02
White	14	0.21	12	0.18	13	0.21	12	0.27
Total Known Race	60	0.91	63	0.93	54	0.87	37	0.82
Non-Resident Alien*	2	0.03	1	0.02	2	0.03	4	0.09
Unknown	4	0.06	4	0.06	6	0.1	4	0.09
Total Enrollment	66	1	68	1	62	1	45	1

#### Ethnicity Data – 2011 to 2014

#### Age Data – 2011 to 2014

	Fall 2011		Fall 201	Fall 2012		Fall 2013		4
	#	%	#	%	#	%	#	%
Under 18 years' old	0	0	0	0	0	0	0	0
18 to 21 years' old	6	0.09	5	0.07	6	0.1	6	0.13
22 to 24 years' old	6	0.09	14	0.21	12	0.19	9	0.2
25 to 34 years' old	31	0.47	33	0.49	29	0.47	18	0.4
35 years and older	23	0.35	16	0.24	15	0.24	12	0.27
Total Enrollment	66	1	68	1	62	1	45	1

#### Sex Data - 2011 to 2014

	Fall 2011		Fall 2012	2	Fall 2013		Fall 2014	
	#	%	#	%	#	%	#	%
Male	27	41%	31	46%	28	45%	23	51%
Female	39	59%	37	54%	34	55%	22	49%

	Total Enrollment	66	100%	68	100%	62	100%	45	100%
--	------------------	----	------	----	------	----	------	----	------

#### **Special Populations**

Due to the environment respiratory therapists' work, the Program has certain physical, mental, and professional standards all enrolled students must maintain. Therapists routinely maneuver patients, lift or carry items, maintain dexterity while manipulating life-support equipment. Below are the physical and mental standards.

#### Physical Standards

- 1. Students will be required to perform the following tasks, including but not limited to, on a regular basis. Apply and refine skills acquired in the classroom and laboratory settings to actual patients and situations in the clinical setting.
  - a. Demonstrate psychomotor skills in manipulating patients and equipment.
  - b. Crouch to locate and plug in electrical equipment.
  - c. Palpate pulses, locate arteries for puncture, and skin temperature.
  - d. Grasp syringes, laryngoscope, and endotracheal tubes.
  - e. Handle small and large equipment for storing, retrieving, and moving.
  - f. Hear verbal directions.
  - g. Hear gas flow through equipment.
  - h. Kneel to perform CPR.
  - i. Lift up to 50 pounds to assist moving patients.
  - j. Manipulate knobs, dials, and equipment associated with diagnostic and therapeutic devices.
  - k. Perform simulated clinical procedures on classmates or mannequins.
  - I. Push and pull large wheeled equipment, i.e., mechanical ventilators or oxygen cylinders.
  - m. Provide and take responsibility for their own transportation to and from assigned clinical sites.
  - n. Reach 5 ½ feet above the floor to attach oxygen devices to the wall outlet.
  - o. Read typed, handwritten, computer information in English.
  - p. See patient conditions such as skin color, work of breathing, and mist flowing through the tubing.
  - q. Select, obtain, assemble, disassemble, correct malfunctions, perform maintenance, and evaluate various pieces of medical equipment.
  - r. Stand for prolonged periods (e.g., to deliver therapy, check equipment).
  - s. Stoop to adjust equipment.
  - t. Communicate effectively in English to patients and other health care providers regarding patient goals and procedures.
  - u. Walk for extended periods within all areas of the clinical site.

v. Write to communicate in English pertinent information (e.g., patient evaluation data, and therapy outcomes).

#### Attitudinal / Mental Standards

- 1. Accept and apply constructive criticism.
- 2. Adhere to institutional and programmatic policies.
- 3. Apply theory to clinical practice.
- 4. Calculate, analyze, interpret, and record numbers and physical data accurately.
- 5. Demonstrate self-direction and independent responsibility.
- 6. Display attitudes/actions consistent with the ethical standards of the profession.
- 7. Display empathy for patients.
- 8. Exhibit social skills necessary to interact effectively with patients, families, supervisors, and coworkers of the same or different cultures; such as, respect, politeness, tact, collaboration, teamwork, discretion.
- 9. Follow verbal and written instructions independently without critical errors.
- 10. Function safely, effectively, and calmly under stressful situations.
- 11. Maintain composure while managing multiple tasks simultaneously.
- 12. Maintain personal hygiene consistent with close personal contact associated with patient care.
- 13. Prioritize multiple tasks, establish goals, plan activities, and use time effectively.
- 14. Work in a positive, constructive manner with peers and instructors.

#### **Student Satisfaction**

Center for Institutional Effectiveness conducts an annual Graduate Follow-up Survey of graduates one year after the student completes the Respiratory Care Program. The primary objective of this survey is to assess the extent to which student feel's the Program, facilities, and services have enabled them to achieve their personal, educational, and professional goals.

#### C.I.E. Data

Have you enrolled at another college in a degree-granting program since your graduation from BCC?

	2011		2012		2013		
	Freq.	%	Freq.	%	Freq.	%	
Yes	1	11%	1	17%	1	9%	
No	8	89%	5	83%	10	91%	

Please indicate your current status.

2011		2012		2013	
Freq.	%	Freq.	%	Freq.	%

Full-time Student	1	100%	1	100%	1	100%
Part-time Student	0	0%	0	0%	0	0%
No Longer Enrolled	0	0%	0	0%	0	0%

How well did the courses you completed at BCC prepare you for further education?

	2011	2012	2013
Composite Score	5.00	4.00	4.00

#### Program Data

The CoARC requires the use of its graduate surveys as part of the Program's ongoing self-assessment. Below are the data for 2011, 2012, 2013, and 2014. The graduate survey data for 2015 is ongoing and will be reported in 2016. All rating a student comments reflect a positive view of the Program. (Data retrieved February 17, 2016 from <u>http://www.dataarc.ws</u>).

#### 2011

	Knowledge base						
А.	(Cognitive Domain) Taught me the professional knowledge base required to function effectively on the job.	Rating:	5	4	3	2	1
		Count:	18	5			1
		Percentage:	75.6	21			4.2
		Total Responses: 24 Mean ± SD: 4.6 ± 0.9					
В.	Taught me the general medical knowledge base required to function effectively on the job.	Rating:	5	4	3	2	1
		Count:	18	5			1
		Percentage:	75.6	21			4.2
		Total Responses: 24 Mean ± SD: 4.6 ± 0.9					
C.	Taught me to interpret pertinent clinical information from medical records and physical findings.	Rating:	5	4	3	2	1
		Count:	16	7			1
		Percentage:	67.2	29.4			4.2
		Total Responses: 24 Mean ± SD: 4.5 ± 0.9					

BCC Academic Program Review, Respiratory Care – 2016

Page **12** of **52** 

D.	Prepared me to recommend appropriate therapeutic interventions based on physiological data and physical findings.	Rating:	5	4	3	2	1
		Count:	14	9			1
		Percentage:	58.8	37.8			4.2
		Total Responses: 24 Mean ± SD: 4.5 ± 0.9					
Ε.	Trained me to make sound clinical judgments.	Rating:	5	4	3	2	1
		Count:	17	6			1
		Percentage:	71.4	25.2			4.2
		Total Responses: 24 Mean ± SD: 4.6 ± 0.9					
	Clinical Proficiency (Psychomotor Domain)						
Α.	Helped me become proficient in the clinical skills required on the job.	Rating:	5	4	3	2	1
		Count:	16	6	1		1
		Percentage:	67.2	25.2	4.2		4.2
		Total Responses: 24 Mean ± SD: 4.5 ± 0.9					
В.	Taught me to perform patient assessment accurately and efficiently.	Rating:	5	4	3	2	1
		Count:	17	6			1
		Percentage:	71.4	25.2			4.2
		Total Responses: 24 Mean ± SD: 4.6 ± 0.9					
C.	Taught me to perform the therapeutic procedures and modalities required on the job.	Rating:	5	4	3	2	1
		Count:	18	5			1
		Percentage:	75.6	21			4.2
		Total Responses: 24 Mean ± SD: 4.6 ± 0.9					
D.	Taught me to perform the diagnostic procedures required on the job.	Rating:	5	4	3	2	1
		Count:	18	5			1
		Percentage:	75.6	21			4.2

		Total						
		Responses: 24 SD: 4.6 ± 0.9	Mean ±					
	Behavioral skills	3D: 4.6 ± 0.9						
	(Affective Domain)							
Α.	Helped me develop effective oral	Rating:		5	4	3	2	1
<b>A</b> .	communication skills.	Nating.		5	4	5	2	1
	communication skins.	Count:		17	5		1	1
		Percentage:		71.4	21		4.2	4.2
		Total						
		Responses: 24	Mean ±					
		SD: 4.5 ± 1.0						
Β.	Helped me develop effective written	Rating:		5	4	3	2	1
	communication skills.							
		Count:		18	5			1
		Percentage:		75.6	21			4.2
		Total						
		Responses: 24	Mean ±					
	- I I I I I I I I I I I I I I I I I I I	SD: 4.6 ± 0.9		_		2	2	
С.	Encouraged me to conduct myself in	Rating:		5	4	3	2	1
	an ethical and professional manner.	Count:		20	3			1
		Percentage:		84	12.6			4.2
		Total		04	12.0			4.2
		Responses: 24	Mean ±					
		SD: 4.7 ± 0.8						
D.	Taught me how to manage my time	Rating:		5	4	3	2	1
	effectively in the clinical setting.							
		Count:		16	7			1
		Percentage:		67.2	29.4			4.2
		Total						
		Responses: 24	Mean ±					
		SD: 4.5 ± 0.9						
Ε.	Taught me to respect the beliefs and	Rating:		5	4	3	2	1
	values of all persons, regardless of							
	cultural background, religion, age, or lifestyle.							
	inestyle.	Count:		21	2			1
		Percentage:		88.2	2 8.4			4.2
		Total		00.2	0.7			2
		Responses: 24	Mean ±					
		SD: 4.8 ± 0.8						
F.	Strongly encouraged me to apply for							
	and pass my:							

NBRC Certification Exam (CRT).	Rating:		5	4	3	2	1
None certification Exam (entry.	Count:		20	3	5	2	1
			-				_
	Percentage:		84	12.6			4.2
	Total						
	Responses: 24	Mean ±					
	SD: 4.7 ± 0.8						
	Rating:		5	4	3	2	1
NBRC Registry Exams (RRT).	Count:		20	3			1
	Percentage:		84	12.6			4.2
	Total						
	Responses: 24	Mean ±					
	SD: 4.7 ± 0.8						
Overall Program Rating:							
Overall Rating: Please rate and							
comment on the OVERALL quality of							
your preparation as a therapist.							
The Overall Rating Average is 4.5	Rating:		5	4	3	2	1
	Count:		17	7	5	2	-
			71.4	, 29.4			
	Percentage:		/1.4	29.4			
	Total						
	Responses: 24	Mean ±					
	SD: 4.7 ± 0.5						

#### 2012

201	-						
	Knowledge base (Cognitive Domain)						
Α.	Taught me the professional knowledge base required to function effectively on the job.	Rating:	5	4	3	2	1
		Count:	15	4			
		Percentage:	79.5	21.2			
		Total Responses: 19 Mean ± SD: 4.8 ± 0.4					
В.	Taught me the general medical knowledge base required to function effectively on the job.	Rating:	5	4	3	2	1
		Count:	14	5			
		Percentage:	74.2	26.5			

		Total Responses: 19	Mean ±					
		SD: 4.7 ± 0.4						
C.	Taught me to interpret pertinent clinical information from medical records and physical findings.	Rating:		5	4	3	2	1
		Count:		14	5			
		Percentage:		74.2	26.5			
		Total Responses: 19 SD: 4.7 ± 0.4	Mean ±					
D.	Prepared me to recommend appropriate therapeutic interventions based on physiological data and physical findings.	Rating:		5	4	3	2	1
		Count:		11	8			
		Percentage:		58.3	42.4			
		Total Responses: 19 SD: 4.6 ± 0.5	Mean ±					
Ε.	Trained me to make sound clinical judgments.	Rating:		5	4	3	2	1
		Count:		11	8			
		Percentage:		58.3	42.4			
		Total Responses: 19 SD: 4.6 ± 0.5	Mean ±					
	Clinical Proficiency (Psychomotor Domain)							
Α.	Helped me become proficient in the clinical skills required on the job.	Rating:		5	4	3	2	1
		Count:		14	5			
		Percentage:		74.2	26.5			
		Total Responses: 19 SD: 4.7 ± 0.4	Mean ±					
В.	Taught me to perform patient assessment accurately and efficiently.	Rating:		5	4	3	2	1
		Count:		16	3			
		Percentage:		84.8	15.9			
		Total Responses: 19 SD: 4.8 ± 0.4	Mean ±					

Page **16** of **52** 

C.	Taught me to perform the therapeutic procedures and modalities required on the job.	Rating:	5	4	3	2	1
		Count:	14	5			
		Percentage:	74.2	26.5			
		Total Responses: 19 Mean : SD: 4.7 ± 0.4	Ŀ				
D.	Taught me to perform the diagnostic procedures required on the job.	Rating:	5	4	3	2	1
		Count:	13	6			
		Percentage:	68.9	31.8			
		Total Responses: 19 Mean : SD: 4.7 ± 0.5	Ŀ				
	Behavioral skills (Affective Domain)						
Α.	Helped me develop effective oral communication skills.	Rating:	5	4	3	2	1
		Count:	12	5	2		
		Percentage:	63.6	26.5	10.6		
		Total Responses: 19 Mean : SD: 4.5 ± 0.7	Ŀ				
В.	Helped me develop effective written communication skills.	Rating:	5	4	3	2	1
		Count:	12	5	2		
		Percentage:	63.6	26.5	10.6		
		Total Responses: 19 Mean : SD: 4.5 ± 0.7	Ŀ				
C.	Encouraged me to conduct myself in an ethical and professional manner.	Rating:	5	4	3	2	1
		Count:	14	3	2		
		Percentage:	74.2	15.9	10.6		
		Total Responses: 19 Mean : SD: 4.6 ± 0.7	Ŀ				
D.	Taught me how to manage my time effectively in the clinical setting.	Rating:	5	4	3	2	1
		Count:	14	4	1		
		Percentage:	74.2	21.2	5.3		

Page **17** of **52** 

		Total						
		Responses: 19	Mean ±					
		SD: 4.7 ± 0.6						
Ε.	Taught me to respect the beliefs and	Rating:		5	4	3	2	1
	values of all persons, regardless of							
	cultural background, religion, age, or							
	lifestyle.							
		Count:		14	3	2		
		Percentage:		74.2	15.9	10.6		
		Total						
		Responses: 19	Mean ±					
		SD: 4.6 ± 0.7						
F.	Strongly encouraged me to apply for							
	and pass my:							
	NBRC Certification Exam (CRT).	Rating:		5	4	3	2	1
	Nonce certification Exam (entry).	Count:		18	. 1	5	_	-
		Percentage:		95.4	5.3			
		Total		55.4	5.5			
			Magne					
		Responses: 19	iviean ±					
		SD: 4.9 ± 0.2		_		-	-	
	NBRC Registry Exams (RRT).	Rating:		5	4	3	2	1
		Count:		18	1			
		Percentage:		95.4	5.3			
		Total						
		Responses: 19	Mean ±					
		SD: 4.9 ± 0.2						
	Overall Program Rating:							
	Overall Rating: Please rate and							
	comment on the OVERALL quality of							
	your preparation as a therapist.							
	The Overall Rating Average is 4.5	Rating:		5	4	3	2	1
		Count:		12	5	2		
		Percentage:		63.6	26.5	10.6		
		Total						
		Responses: 19	Mean ±					
		SD: 4.5 ± 0.7						

2013

Knowledge base (Cognitive Domain)

Α.	Taught me the professional knowledge base required to function effectively on the job.	Rating:	5	4	3	2	1
		Count:	15	5			
		Percentage:	75	25			
		Total Responses: 20 Mean $\pm$ SD: 4.8 $\pm$ 0.4					
В.	Taught me the general medical knowledge base required to function effectively on the job.	Rating:	5	4	3	2	1
		Count:	16	4			
		Percentage:	80	20			
		Total Responses: 20 Mean $\pm$ SD: 4.8 $\pm$ 0.4					
C.	Taught me to interpret pertinent clinical information from medical records and physical findings.	Rating:	5	4	3	2	1
		Count:	16	4			
		Percentage:	80	20			
		Total Responses: 20 Mean $\pm$ SD: 4.8 $\pm$ 0.4					
D.	Prepared me to recommend appropriate therapeutic interventions based on physiological data and physical findings.	Rating:	5	4	3	2	1
		Count:	16	4			
		Percentage:	80	20			
		Total Responses: 20 Mean $\pm$ SD: 4.8 $\pm$ 0.4					
Ε.	Trained me to make sound clinical judgments.	Rating:	5	4	3	2	1
		Count:	16	2	2		
		Percentage:	80	10	10		
		Total Responses: 20 Mean $\pm$ SD: 4.7 $\pm$ 0.6					
	Clinical Proficiency						
	(Psychomotor Domain)						
Α.	Helped me become proficient in the clinical skills required on the job.	Rating:	5	4	3	2	1

		Count:	18	2			
		Percentage:	90	10			
		Total Responses: 20 Mean ± SD: 4.9 ± 0.3					
В.	Taught me to perform patient assessment accurately and efficiently.	Rating:	5	4	3	2	1
		Count:	17	3			
		Percentage:	85	15			
		Total Responses: 20 Mean ± SD: 4.8 ± 0.4					
C.	Taught me to perform the therapeutic procedures and modalities required on the job.	Rating:	5	4	3	2	1
		Count:	17	2	1		
		Percentage:	85	10	5		
		Total Responses: 20 Mean ± SD: 4.8 ± 0.5					
D.	Taught me to perform the diagnostic procedures required on the job.	Rating:	5	4	3	2	1
		Count:	17	2	1		
		Percentage:	85	10	5		
		Total Responses: 20 Mean ± SD: 4.8 ± 0.5					
	Behavioral skills (Affective Domain)						
Α.	Helped me develop effective oral communication skills.	Rating:	5	4	3	2	1
		Count:	15	4	1		
		Percentage:	75	20	5		
		Total Responses: 20 Mean ± SD: 4.7 ± 0.6					
В.	Helped me develop effective written communication skills.	Rating:	5	4	3	2	1
		Count:	15	3	2		
		Percentage:	75	15	10		
		Total Responses: 20 Mean ± SD: 4.7 ± 0.7					

Page **20** of **52** 

	- I I IC.	<b>.</b>	-		2	2	
С.	Encouraged me to conduct myself in an ethical and professional manner.	Rating:	5	4	3	2	1
	an ethical and professional manner.	Count:	18	2			
		Percentage:	90	10			
		Total	50	10			
			ean ±				
		SD: 4.9 ± 0.3	cun <u>-</u>				
D.	Taught me how to manage my time	Rating:	5	4	3	2	1
	effectively in the clinical setting.	nating.	5		5	-	-
		Count:	15	4	1		
		Percentage:	75	20	- 5		
		Total			-		
			ean ±				
		SD: 4.7 ± 0.6					
Ε.	Taught me to respect the beliefs and	Rating:	5	4	3	2	1
	values of all persons, regardless of	U					
	cultural background, religion, age, or						
	lifestyle.						
		Count:	17	2		1	
		Percentage:	85	10		5	
		Total					
		Responses: 20 Me	ean ±				
		SD: 4.8 ± 0.7					
F	Strongly encouraged me to apply for						
	and pass my:						
	NBRC Certification Exam (CRT).	Rating:	5	4	3	2	1
		Count:	19	1			
		Percentage:	95	5			
		Total					
		Responses: 20 Me	ean ±				
		SD: 5.0 ± 0.2					
	NBRC Registry Exams (RRT).	Rating:	5	4	3	2	1
		Count:	19	1			
		Percentage:	95	5			
		Total					
		Responses: 20 Me	ean ±				
		SD: 5.0 ± 0.2					
	Overall Program Rating:						
	Overall Rating: Please rate and						
	comment on the OVERALL quality of						
	your preparation as a therapist.						
		Rating:	5	4	3	2	1
	The Overall Rating Average is 4.7	Count:	14	5	1		
		Percentage:	70	25	5		

Total Responses: 20 Mean ± SD: 4.7 ± 0.6			

2014

201	4							
	Knowledge base							
	(Cognitive Domain)							
Α.	Taught me the professional knowledge base required to function effectively on the job.	Rating:		5	4	3	2	1
		Count:		22	7			
		Percentage:		74.8	23.8			
		Total Responses: 29 SD: 4.8 ± 0.4	Mean ±					
В.	Taught me the general medical knowledge base required to function effectively on the job.	Rating:		5	4	3	2	1
		Count:		22	6	1		
		Percentage:		74.8	20.4	3.4		
		Total Responses: 29 SD: 4.7 ± 0.5	Mean ±					
C.	Taught me to interpret pertinent clinical information from medical records and physical findings.	Rating:		5	4	3	2	1
		Count:		22	7			
		Percentage:		74.8	23.8			
		Total Responses: 29 SD: 4.8 ± 0.4	Mean ±					
D.	Prepared me to recommend appropriate therapeutic interventions based on physiological data and physical findings.	Rating:		5	4	3	2	1
		Count:		20	9			
		Percentage:		68	30.6			
		Total Responses: 29 SD: 4.7 ± 0.5	Mean ±					

BCC Academic Program Review, Respiratory Care – 2016

Page **22** of **52** 

Ε.	Trained me to make sound clinical judgments.	Rating:	5	4	3	2	1
		Count:	23	6			
		Percentage:	78.2	20.4			
		Total					
		Responses: 29 Mean ± SD: 4.8 ± 0.4					
	Clinical Proficiency						
	(Psychomotor Domain)						
Α.	Helped me become proficient in the	Rating:	5	4	3	2	1
	clinical skills required on the job.						
		Count:	24	5			
		Percentage:	81.6	17			
		Total					
		Responses: 29 Mean ±					
		SD: 4.8 ± 0.4					
в.	Taught me to perform patient	Rating:	5	4	3	2	1
	assessment accurately and efficiently.						
		Count:	24	5			
		Percentage:	81.6	17			
		Total					
		Responses: 29 Mean ±					
		SD: 4.8 ± 0.4					
С.	Taught me to perform the therapeutic	Rating:	5	4	3	2	1
	procedures and modalities required						
	on the job.						
		Count:	21	8			
		Percentage:	71.4	27.2			
		Total					
		Responses: 29 Mean ±					
_		SD: 4.7 ± 0.4	_		-	-	
D.	Taught me to perform the diagnostic	Rating:	5	4	3	2	1
	procedures required on the job.		20	0	4		
		Count:	20	8	1		
		Percentage:	68	27.2	3.4		
		Total Responses: 29 Mean ±					
		Responses: 29 Mean ± SD: 4.7 ± 0.5					
	Behavioral skills	JD. 4.7 ± 0.5					
	(Affective Domain)						
Α.	Helped me develop effective oral	Rating:	5	4	3	2	1
Α.	communication skills.	Nating.	5	4	5	Z	T
		Count:	22	7			
		Percentage:	74.8	23.8			
		rentage.	74.0	23.0			

		Tatal						
		Total Responses: 29 SD: 4.8 ± 0.4	Mean ±					
В.	Helped me develop effective written communication skills.	Rating:		5	4	3	2	1
		Count:		20	9			
		Percentage:		68	30.6			
		Total						
		Responses: 29	Mean ±					
		SD: 4.7 ± 0.5						
С.	Encouraged me to conduct myself in an ethical and professional manner.	Rating:		5	4	3	2	1
		Count:		22	7			
		Percentage:		74.8	23.8			
		Total Responses: 29 SD: 4.8 ± 0.4	Mean ±					
D.	Taught me how to manage my time effectively in the clinical setting.	Rating:		5	4	3	2	1
		Count:		21	8			
		Percentage:		71.4	27.2			
		Total Responses: 29 SD: 4.7 ± 0.4	Mean ±					
Ε.	Taught me to respect the beliefs and values of all persons, regardless of cultural background, religion, age, or lifestyle.	Rating:		5	4	3	2	1
		Count:		23	5	1		
		Percentage:		78.2	17	3.4		
		Total Responses: 29 SD: 4.8 ± 0.5	Mean ±					
F.	Strongly encouraged me to apply for and pass my:							
	NBRC Certification Exam (CRT).	Rating:		5	4	3	2	1
		Count:		28	1			
		Percentage:		95.2	3.4			
		Total Responses: 29 SD: 5.0 ± 0.2	Mean ±					
	NBRC Registry Exams (RRT).	Rating:		5	4	3	2	1
		Count:		27	2			
		Percentage:		91.8	6.8			

	Total Responses: 29 Mean ± SD: 4.9 ± 0.3					
Overall Program Rating:						
Overall Rating: Please rate and comment on the OVERALL quality of your preparation as a therapist.	Rating:	5	4	3	2	1
	Count:	23	6			
	Percentage:	78.2	20.4			
The Overall Rating Average is 4.8	Total Responses: 29 Mean ± SD: 4.8 ± 0.4					

#### Various comments (anonymously posted):

"Additional Dr. Ceconi, Professor Goss and Professor Sandy were excellent, I received all the main knowledge I needed from all of them. I am very grateful for all I learned, because once you start working nobody has the time to teach you things properly, the training I received on the job was short and basically was training while working. I am thankful for their advice to me while being a student about time management and I'm especially thankful to all I learned from my mechanical ventilation class, because it gave me the logic I need to figure out how to work different equipment, it all reverts back to the same principles, the troubleshooting is almost the same for any type of vent. I'm still learning new things on the job every day, but overall the program is excellent, I compare myself with students from other programs and I feel much better prepared. I will recommend the BCC program to anyone who desires to become a Respiratory Therapist."

"Additional Doctor Ceconi, Professor Goss, Professor Sandra, and Professor Liz were extremely instrumental of I becoming a Registered Respiratory Therapist. I was well prepared by the program to the point that I felt the state board was not too difficult. I will recommend the respiratory program from Bergen Community College to any student that would like to get into the field."

"It was a very excellent training I received from Bergen Community College and it really helped me to get a job and perform well."

"Dr. Ceconi, Professor Goss, Professor McCleaster and the rest of the staff of clinical instructors made this program one of the best. The opportunities and education received through lectures and clinical time gave a great insight to what the field of respiratory care is like."

"I really appreciated all the effort and patience shown to us when we did not understand something and making it clearer so we could be successful in our field."

"Highly recommend the RT program at BBC. Professors are professional, extremely knowledgeable in the subject matter and the program is well organized. I found the clinical rotations/experiences to be conducive to my learning and success in the program. Excellent Program."

## Learning Outcomes Assessments

Throughout the Program learning outcomes are routinely assessed. In the didactic, laboratory, and clinical environment, students are evaluated in the cognitive, psychomotor, and affective domains. Specifically, in the didactic setting, students are assessed with quizzes, oral presentations, and written assignments. Student assessment is performance-based (psychomotor) in the laboratory and clinical settings. Additionally, in the clinical setting, students are evaluated in the affective domain. Students are required to maintain a 2.5 / 4.0 GPA in core program courses. Students failing one course are dismissed from their current cohort and permitted to reenter the following year, with remediation.

Success rate for Certified and Registered Respiratory Therapist National Board Exams

	2011	2012	2013	2014	2015
CRT	24	24	28	29	21
RRT	20	19	23	21	16

Note: In 2015, the NBRC changed the examination format.

#### **Student Success**

The table below reflects the Program outcomes to the four other respiratory care programs in New Jersey. The Rutgers program has both an associate and bachelor degree offering, the data reflect their associate degree for accurate comparison. Reporting information from the CoARC reflects a 3-year period from 2011 to 2013. The CoARC has verified the outcomes data from the Program's 2014 Annual Report of Current Status (RCS).

#### Attrition and Graduation Rates

Program	Attrition	Graduates	Enrolled	Graduates	Enrolled	Graduates	Enrolled
		2013		2012		2011	
Bergen Community College	12.1%	30	28	25	31	28	32

Brookdale Community College	12.8%	20	28	20	22	23	28
County College of Morris	3.4%	26	17	22	24	18	17
Rutgers University (Newark)	36.2%	16	20	16	24	19	25
Rutgers University (Stratford)	5.1%	23	26	26	23	28	30

Have you enrolled at another college in a degree granting program since your graduation from BCC?

2011			2012		2013		
	Freq.	%	Freq.	%	Freq.	%	
Yes	1	11%	1	17%	1	9%	
No	8	89%	5	83%	10	91%	

What is the name of your current (most recently attended) college?

2011	2012	2013
Montclair State	Felician College	Kaplan University
University	(1 grad)	(1 grad)
(1 grad)		

Is your current job related to the program of study you completed at BCC?

	2011		2012		2013	
	Freq.	%	Freq.	%	Freq.	%
Yes, directly related	6	75%	3	75%	9	100%
Yes, somewhat related	1	13%	0	0%	0	0%
No, not related	1	13%	1	25%	0	0%

Through what source did you hear about your current position?

	2011		2012		2013	
	Freq.	%	Freq.	%	Freq.	%
College Placement Office	0	0%	0	0%	0	0%
An employment agency	0	0%	0	0%	0	0%

A newspaper advertisement	2	33%	1	33%	5	71%
The Co-op Program	0	0%	0	0%	0	0%
A friend or relative	3	50%	1	33%	1	14%
College faculty or staff	1	17%	1	33%	1	14%
The Internet	0	0%	0	0%	0	0%
Other	0	0%	0	0%	0	0%

#### Employers Survey

The CoARC requires the Program to survey employer's six-months after graduating (assuming employment). The survey responses have always been positive with scores of four and five out of five points. Questions examine three areas: graduate's knowledge, clinical ability, and behavioral ability. Those questions ask:

- 1. The graduate's knowledge to
  - a. Acquire and evaluate data to assess the appropriateness of prescribed therapy.
  - b. Participate in the development and modification of respiratory care plans.
  - c. Initiate appropriate therapeutic interventions, monitor patient responses, and modify therapy to achieve goals.
  - d. Promote cardiopulmonary wellness, disease prevention, and disease management in a variety of settings.
  - e. Provide patient, family, and community education.
  - f. Encourage evidence-based practice by using established clinical practice guidelines.
- 2. The graduate's clinical ability to
  - a. Demonstrate the clinical competencies required for entry into practice.
  - b. Perform the therapeutic procedures and modalities required on the job in a safe and effective manner.
  - c. Perform the diagnostic procedures required on the job in a safe and effective manner.
  - d. Apply problem-solving strategies in the patient care setting.
- 3. The graduate's behavioral ability to
  - a. Demonstrate effective oral communication skills.
  - b. Demonstrate effective written communication skills.
  - c. Communicate effectively in a variety of patient care settings.
  - d. Interact effectively with other members of the healthcare team.
  - e. Communicate effectively in diverse groups while respecting beliefs and values of all persons, regardless of cultural background, religion, age or lifestyle.

- f. Think critically (i.e., apply knowledge, provide appropriate patient care, and adapt to changes in clinical conditions).
- g. Conduct his / herself in an ethical and professional manner.
- h. Recognize the importance of earning the professional credential (i.e., CRT or RRT) required for entry into practice.

Extracted from the CoARC Employer Survey CoARC ES Entry Rev 7.15 – accessed March 13, 2016

#### Data Needs

Currently the local workforce is very pleased and continues to hire our graduates. The Program continues to meet annually with the advisory committee and obtain feedback on our graduates.

## Focus on Faculty and Staff

## Demographics

The Respiratory Care Program (Program) consists of three full-time faculty and thirty-seven adjunct faculty. A faculty member, in particular adjunct faculty, is hired into a position best suited to their particular skills within respiratory care. The Program is also required to have a medical director to ensure didactic and supervised clinical instruction meets current practice guidelines.

The Commission on Accreditation for Respiratory Care (CoARC) sets standards for key program personnel. In addition to educational degree requirements, a Program Director and Director of Clinical Education must

- 1. hold a valid Registered Respiratory Therapy (RRT) credential and current state license;
- 2. have a minimum of four (4) years' experience as a Registered Respiratory Therapist with at least two (2) years in clinical respiratory care; and
- 3. have a minimum of two (2) years' experience teaching in an accredited respiratory care program either as an appointed faculty member or as a clinical preceptor.

The CoARC standards also require that in addition to the key personnel, there must be sufficient personnel resources to provide effective instruction in the didactic, laboratory, and clinical setting. This is reflected in the Programs goals of low student to faculty ratios for laboratory and clinical experiences.

Name	Program Role / Rank	Degree	Credentials	Assigned Courses
Amy Ceconi	Program Director / Professor	PhD	RRT-NPS, RPFT	RSP-119, RSP-121, RSP- 226, RSP-235, and RSP- 241
Kelly Horgan	Director of Clinical Education / Assistant Professor	MBA	RRT-NPS	RSP-121, RSP-210, RSP- 220, RSP-225, RSP-226, RSP-231, RSP-235, and RSP-240
Joseph Goss	Faculty / Assistant Professor	MSJ	RRT-NPS, AE-C	RSP-110, RSP-222, RSP- 225, RSP-226, RSP-231, RSP-235, and RSP-250
Deborah Goss	Medical Director	MD		RSP-225, RSP-226, RSP- 231, and RSP-235
Isam Abbasi	Clinical instructor / Adjunct Faculty	AAS	RRT	RSP-231 and RSP-235

#### Faculty Profiles

Nancy Alberto	Clinical instructor /	BS	RRT	RSP-231 and RSP-235
	Adjunct Faculty			
Eugene Babitz	Clinical instructor /	AAS	RRT	RSP-225
Elles David	Adjunct Faculty	DCN	CDT	
Ellen Basek	Clinical instructor /	BSN	CRT	RSP-231 and RSP-235
	Adjunct Faculty		DOT	
Felix Berdejo	Clinical instructor /	AAS	RRT	RSP-231 and RSP-235
	Adjunct Faculty		DDT	DCD 240
Betty Breedveld	Laboratory instructor	AAS	RRT	RSP-240
Caulas Duanas	/ Adjunct Faculty	A A C		DCD 121 DCD 225 and
Carlos Broncano	Clinical instructor /	AAS	RRT, NPS, CPFT	RSP-121, RSP-225, and
	Adjunct Faculty	DC.	DDT	RSP-226
Vivian Casabona	Clinical instructor /	BS	RRT	RSP-231 and RSP-235
	Adjunct Faculty	A A C	CDT	
Maureen Condur	Clinical instructor /	AAS	CRT	RSP-121, RSP-225, and
	Adjunct Faculty	٨٨٢	DDT	RSP-226
Ponce De Leon	Clinical instructor /	AAS	RRT	RSP-231 and RSP-235
Provide Provid	Adjunct Faculty		0.0-	
Ronald Delacruz	Clinical instructor /	AAS	RRT	RSP-231 and RSP-235
	Adjunct Faculty		DDT	
Alicia Di Camillo	Clinical instructor /	AAS	RRT	RSP-121, RSP-225, and
terre en	Adjunct Faculty		0.0-	RSP-226
Joanna Escobar	Clinical instructor /	AAS	RRT	RSP-121, RSP-225, RSP-
	Adjunct Faculty			226, RSP-231, and RSP- 235
Cross Form	Clinical instructor /	AAS	RRT	
Grace Fong	Adjunct Faculty	AAS		RSP-121, RSP-225, and RSP-226
Candace Goddard	Clinical instructor /	BA	RRT	RSP-220 RSP-231 and RSP-235
Canuace Goudard	Adjunct Faculty	DA		K3P-231 and K3P-235
Annelise Haerens	Clinical instructor /	AAS	CRT	RSP-121 and RSP-225
	Adjunct Faculty	AAS	CIVI	NJI -121 allu NJF-22J
Mike Innamorato	Clinical instructor /	AAS	RRT	RSP-121 and RSP-225
	Adjunct Faculty			
Karen Jordan	Clinical instructor /	AAS	CRT	RSP-231 and RSP-235
	Adjunct Faculty	, (10)	Citi	Nor 201 unu NJI 200
Christine Lugris	Clinical instructor /	MBA	RRT	RSP-121, RSP-225, and
ennotine Eugno	Adjunct Faculty	WID/ (		RSP-226
Quinones Lynette	Clinical instructor /	AAS / BSN	RRT	RSP-231 and RSP-235
	Adjunct Faculty			
Luis Manrique	Clinical instructor /	AAS	RRT	RSP-231 and RSP-235
	Adjunct Faculty			
John Mathew	Clinical instructor /	MA	RRT-NPS	RSP-121, RSP-225, and
	Adjunct Faculty			RSP-226
Valsa Mathew	Clinical instructor /	NP / MA	RRT	RSP-231 and RSP-235
		,		

	Adjunct Faculty			
Sandra Mc Cleaster	Course instructor / Adjunct Faculty	MA	RRT	RSP-260
William Mc Goey	Clinical instructor / Adjunct Faculty	AAS	RRT	RSP-121 and RSP-225
Elizabeth Mliczek	Clinical instructor / Adjunct Faculty	BA	RRT	RSP-225, RSP-226 and RSP-240
Anzule Navarrete	Clinical instructor / Adjunct Faculty	AAS	RRT	RSP-121, RSP-225, and RSP-226
Deirde Nery	Clinical instructor / Adjunct Faculty	AAS	RRT	RSP-121 and RSP-225
Linda O'Neill	Clinical instructor / Adjunct Faculty	AAS	CRT	RSP-121, RSP-225, and RSP-226
Ernst Samson	Clinical instructor / Adjunct Faculty	BS	RRT	RSP-121 and RSP-225
Louis Sandler	Clinical instructor / Adjunct Faculty	AAS	RRT	RSP-121, RSP-225, and RSP-226
Nigina Shindelman	Clinical instructor / Adjunct Faculty	BS	RRT	RSP-121 and RSP-225
George Thumpayil	Clinical instructor / Adjunct Faculty	AAS	RRT	RSP-231 and RSP-235
Lisa Tripodi	Clinical instructor / Adjunct Faculty	BS	RRT	RSP-231 and RSP-235
Jana Tyler	Clinical instructor / Adjunct Faculty	AAS	RRT-NPS	RSP-231 and RSP-235
Gita Vashi	Clinical instructor / Adjunct Faculty	BS	RRT, RPFT	RSP-121 and RSP-225
Malou Whitney	Clinical instructor / Adjunct Faculty	AAS	CRT	RSP-121, RSP-225, and RSP-226
Charisse Zieminski	Clinical instructor / Adjunct Faculty	MAS	RRT, NRP	RSP-121 and RSP-225

#### **Professional Activities**

#### **College Activities**

Faculty member Amy Ceconi is currently working on writing grants for funding for new equipment for the laboratory, grants funded 2015-spring 2016 Perkins and CIRD grant projects approved for funding. The equipment will be delivered by June 2016. In addition, she has mentored a student in the annual Beacon Conference 2012 and the student won the presentation in the Health Professions section. This spring, 2016 again she is mentoring a senior student who will be presenting at the Beacon Conference being held June 3, 2016. In 2014, she also mentored a student to present a topic at the annual NJSRC

Conference in Atlantic City, NJ. She also annually writes reference and recommendation letters for students for scholarships and job references.

Faculty member Joseph Goss is working with academic advising as a Success Ambassador. The program aims to improved student success during their first year. Ambassadors are assigned five students to be a contact regarding tutoring, counseling or advising, financial aid, bursar, registration or an academic department. Additionally, he provides advising in the academic advisement center.

Faculty member Kelly Hogan is working on a research project in collaboration between the Paramedic Science and the Respiratory Care Students. The collaboration involves communication between the two groups. The respiratory care students are focusing on Situation, Background, Assessment, Recommendation (SBAR), which is a technique that can be used to facilitate prompt and appropriate communication. The paramedic students will focus on debriefing. The paramedic students will bring in a patient in the final semester in a simulated emergency department scenario and the respiratory students will focus on the SBAR aspect and patient treatment.

#### **Professional Activities**

The Program faculty is encouraged to attend national and state professional education conferences. Regularly, faculty attends national and local conferences. All faculty (and students) are members of the American Association for Respiratory Care, the professional association for respiratory therapists. Faculty member Joseph Goss is a New Jersey delegate to the national association and past-president.

Faculty have attended or participated the following conferences in the past

- American Association for Respiratory Care International Congress
- American Association for Respiratory Care Summer Forum
- American Association for Respiratory Care Pulmonary Disease Educators Course
- New Jersey Society for Respiratory Care Annual Conference
- New Jersey Society for Respiratory Care Northern Directors Conference
- NJ / NY Managers and Educators Conference
- Various online webinar courses offered by the American Association for Respiratory Care

#### **Publications and Presentations**

Faculty have published and presented to local and national professional and community groups on various topics. Over the last few years, faculty have presented at multiple conferences and symposium.

- Tri-State Best Practices
- Bergen Community College CITL Summer Institute
- Bergen Honors Conference
- Beacon College Conference Bergen Community College
- American Association for Respiratory Care International Congress

- New Jersey Society for Respiratory Care Annual Conference
- New Jersey Society for Respiratory Care Spring Conference
- New Jersey / New York Managers and Educators Conference
- St. Barnabas Medical Center Annual Lecture Series
- Englewood Hospital and Medical Center Annual Conference
- The Valley Hospital Education Day
- Newark Beth Israel Medical Center Conference Day

Faculty have published articles in local and national publications, such as, the New Jersey Society for Respiratory Care Scope Newsletter and American Association for Respiratory Care AARC Times.

#### Adjunct Faculty

Adjunct faculty is a valuable part of the Program's educational process. Adjunct faculty primarily instruct in the clinical setting with a few instructing on-campus. They are hired to fill specific positions and are uniquely qualified for those positions.

#### Hiring

Adjunct hiring is initially coordinated by the Program Director and if a clinical position, the Director of Clinical Education. Applicants submit a resume, complete an employment application, and interview with the Department Chair and Director of Clinical Education. The applicant will then interview with the Divisional Dean and Human Resources. All new employees need to complete a criminal background check, arrange an independent drug screening, and are invited to participate in the Adjunct Orientation this Weekend. The Divisional Dean and the Academic Vice President have final approval of the appointment of adjunct faculty.

#### Coordination and Communication

As required by the CoARC, clinical coordination is the responsibility of the Director of Clinical Education (DCE). The DCE is responsible for training new adjunct faculty on the Program's policies and procedures, reviewing the student evaluation forms, communicating meeting information, completing faculty evaluations, and on-going training of all adjunct faculty. The DCE routinely visits the clinical sites throughout the academic year discussing Program information and answering questions the adjunct faculty may have.

Communication is on-going throughout the year. All adjunct faculty are expected to attend the college Adjunct Conference and Program's fall, spring, and summer meetings. Between those meetings, adjuncts will receive email messages and phone calls as necessary.

Support

The Program DCE supports all the adjunct faculty training. Adjuncts are trained on the Program's student evaluation forms, competencies, and inter-rater reliability program. The DCE visits the adjunct's clinical sites throughout the year and is available via email or phone to respond to questions or concerns. The Program also supports the adjunct faculty in arranging coverage when requests to attend education conferences are submitted.

## Staff

#### Administrative Assistant Support

Support staff consists of an administrative assistant shared with other health profession programs, and additionally, the Dean's administrative assistant will support program needs. The Department's administrative assistant helps coordinate Program's mailings, ordering supplies, maintains Program syllabi and general secretarial support. Both assistants' help with yearly self-studies and reaccreditation process by gathering institutional data.

#### Other Support

All faculty have access and assistance to the college technology service through the Help Desk and Center for Innovation in Teaching and Learning (CITL). Faculty participate in course offerings though the CITL to enhance teaching methods and student engagement.

Data Needs Not applicable

## Focus on Curriculum

## Summary of Program Curriculum

The Respiratory Care Program (Program) follows guidelines and recommendation from the Commission on Accreditation for Respiratory Care (CoARC). The curriculum was last revised in 2012 based, in part, on the CoARC recommendations. Additionally, the Program regularly reviews and compares the curriculum to the National Board for Respiratory Care's (NBRC) detailed content outline for the Therapist Multiple Choice and Clinical Simulation examinations.

The Program follows a two-year sequence with fall, a 6-week summer session, and graduation in the spring of the second year. The graduates earn an Associate in Applied Science degree. After completion, the students are eligible for all NBRC examinations and state licensure. Successful completion of Program and exit examinations are required for graduation.

First Semester		Credits
BIO-109	Anatomy & Physiology I	4
RSP-110	Respiratory Care Pharmacology	2
RSP-119	Introduction to Respiratory Care	4
RSP-121	Respiratory Care Clinical Externship I (16 hrs. / wk.	1
	x 9 wks. = 144 hrs.)	
		14
Second Semester		
BIO-209	Anatomy & Physiology II	4
CHM-112	College Chemistry	4
RSP-210	Cardiopulmonary Diseases and Disorders	3
RSP-220	Fundamentals of Respiratory Critical Care	3
RSP-222	Cardiopulmonary Anatomy and Physiology	2
RSP-225	Respiratory Care Clinical Externship II (16 hrs. / wk. = 240 hrs.)	2
		18
Summer Session		
RSP-226	Respiratory Care Clinical Externship III (40 hrs. / wk. = 240 hrs. – based on 6 weeks)	2
		2
Third Semester		
BIO-104	Microbiology	4
RSP-231	Respiratory Care Clinical Externship IV (16 hrs. / wk. = 240 hrs.)	2
RSP-240	Diagnostic Monitoring and Patient Assessment	4
RSP-250	Respiratory Critical Care	4
WRT-201	English Composition II	3
	PCC Academic Program Poviow, Pospiratory Caro 2014	

#### Program Courses

		17
Fourth Semester		
RSP-235	Respiratory Care Clinical Externship V (16 hrs. / wk. = 240 hrs.)	2
RSP-241	Neonatal and Pediatric Respiratory Care	3
RSP-260	Special Topics in Respiratory Care	3
•••	Humanities Elective*	3
	Social Science Elective*	3
		14

#### Humanities and Social Sciences\*

Two general education courses selected from the following fields, with no more than one course in any one field: Arts (Art [ART], Music [MUS], Theatre Arts [THR], Cinema Studies [CIN]); History (HIS); Literature (LIT); Philosophy and Religion (PHR); World Languages and Cultures (LAN); Economics (ECO); Geography (GEO); Political Science (POL); Psychology (PSY); Sociology (SOC) and Anthropology (ANT).

#### Curricular Issues

The Program curriculum is designed around the Commission on Accreditation for Respiratory Care standards, National Board for Respiratory Care examination matrix, current evidence-based practice, and input from the Program Advisory Committee. The Program has flexibility to modify content presented to meet current best practices.

Currently, with the advancement of respiratory care, it is challenging to present all the necessary knowledge and skills within a two-year program. The Program will need to review the content presented, identify, and minimize overlapping content areas.

Unfortunately, there are few degree advancement opportunities within respiratory care. There are currently two bachelor degree programs in New Jersey. Articulation agreements will need to be addressed in the future.

#### Lead-in Courses

Prospective applicants must be prepared for independent study, medical writing, basic mathematical calculations, and critical thinking. Students enrolled in the Program are required to successfully complete a course in basic algebra, if indicated by mathematics section of the Basic Skills Assessment Test. A student may be placed in English Basic Skills courses if indicated by the results of the English portion of the Basic Skills Assessment Test.

Entry requirements for the program include a Grade Point Average of 2.00 on a 4.00 scale. If a prospective student is entering directly from high school, the prerequisite courses include chemistry with lab, biology with lab, and algebra. Students without these courses or students that have taken the

BCC Academic Program Review, Respiratory Care – 2016

Page **37** of **52** 

science courses more than five years prior to application are required to substitute the high school courses with Anatomy & Physiology I (BIO109), Introduction to Chemistry (CHM100), and Algebra for Liberal Arts (MAT-040). High school Biology is waived if college biology, preferably Anatomy & Physiology I (BIO109), is successfully completed.

All applications and transcripts are due by February 1 for fall admission. Prospective applicants meeting the minimum requirements proceed in the admissions process. If seats remain open after the February 1 deadline, students with prerequisite course in-progress will have their application evaluated on a case-by-case basis.

All applicants are required to take the Respiratory Care Admissions Examination, administered by Health Education Systems Incorporated (HESI), a national health professions standardized admissions examination. The sections required are reading comprehension, vocabulary, grammar, math, science, biology (for high school students only), anatomy and physiology (for college students), chemistry, and a personality and learning style profile.

Students are permitted to transfer general education and sciences courses, as per the College transfer policies. Applicable college science courses taken more than five years ago are not transferable. All Program courses must be taken at Bergen Community College. No dual enrollment or articulation agreements with high schools are offered.

A criminal background check is required as part of the admissions process. Clinical facilities required all students engaged in patient care to complete a criminal background checks. These checks are conducted by an external agency, and the information is sent to the Dean of Health Professions. All background reports must be clear to continue the admission process and to be invited to take the HESI admissions exam. Any applicant with a background report that is not clear will not be eligible for consideration, and the admission process is ended.

All Respiratory Care students are required to maintain personal medical health insurance and are recommended to maintain professional liability insurance. Additionally, students are offered American Heart Association Healthcare Provider Cardio-Pulmonary Resuscitation (CPR) with AED through the Program or students must obtain certification. In addition, all students are required to complete a health examination upon admission to the Program, submit titers for immunity to measles, mumps, rubella, varicella and Hepatitis B. Students must also have a current Tdap vaccine and fulfill the requirement for a yearly Mantoux screening test. A yearly urine drug screen is also required.

#### Follow-up Courses

Respiratory Care Program courses are sequential. The content and clinical skills build upon prior knowledge and experience. While there are no follow-up courses offered through the College, the faculty encourages students to continue their education with a bachelor's degree at other colleges and universities. The students are also required through state licensure and credentialing to earn continuing education. Numerous local and national providers offer courses covering all aspects of respiratory care.

#### Scheduling

The Respiratory Care Program maintains a tight and orderly schedule. The Program Director periodically reviews the course schedules to evaluate any necessary course schedule changes. The Clinical Coordinator schedules students' clinical experience in various hospitals and other facilities. With two, simultaneous cohorts, the didactic, laboratory and clinical courses extend five-days per week during the fall and spring semesters. Additionally, the summer session is taught over five-days during summer session one. Full-time faculty, with the exception of the Special Topics course that is taught by an adjunct faculty, teaches Program didactic courses. Laboratory and clinical courses are taught by full-time faculty and various adjunct faculty. Program faculty is assigned to each clinical site to provide on-site instruction.

#### Assessment

The Program Director, Clinical Coordinator, and other key faculty periodically compare the curriculum to the National Board for Respiratory Care (NBRC) exam matrix and current clinical practice. In March 2011, the Committee on Accreditation for Respiratory Care (CoARC) conducted a site visit and recommended re-accreditation in the year 2021 a ten-year period. The Program Director is responsible for a yearly CoARC outcomes report. The CoARC has published "thresholds for success" that must be met on an annual basis. The Program receives notification annually that it meets or exceeds all "thresholds" for success on each of the required outcome measures.

The Program assesses the students throughout the program with various written and laboratory examinations, oral presentations, clinical case presentations, and clinical performance covering the cognitive, psychomotor, and affective domain. Students must achieve at least a "C+" grade in all of the respiratory care courses.

The Program assesses its outcomes by various methods including a pseudo-Therapist Multiple Choice self-assessment examination and a NBRC Clinical Simulation self-assessment examination with both passing thresholds based on the current national threshold. Additionally, the Program tracts student performance obtaining NBRC CRT and RRT credential, an employer survey, on-time graduation rate, and the CoARC Graduate survey.

#### Innovations or Changes in Last Five Years

All full-time faculty use Moodle as course supplement, including testing. Through publishing companies, four courses use online digital learning materials. Credentialing exam preparation software, which was computer based, has been updated with online access. Laboratory equipment is customarily updated to provide students with the latest technology. In some cases, laboratory equipment exceeds what hospital facilities use.

One faculty member has begun using a flipped classroom model endeavoring to enhance student engagement. In three courses, students review video lectures and self-test prior to class. In class, the students work on group assignments and bring it together at the end.

## Data Needs

In the future, the Program should consider which course(s) may be eligible to be changed to a hybrid format or completely web based.

BCC Academic Program Review, Respiratory Care – 2016

Page **40** of **52** 

# Focus on Support

## Technology

The Respiratory Care Program (Program) is a technology-oriented program. Health care today is driven by software and hardware technology. The Program utilizes various technologies throughout the program in the didactic, laboratory, and clinical environment. The Program currently has eight computers with internet access in the laboratory, with one teacher workstation. These computers have general software for word processing, presentation, and spreadsheet functionality. Additionally, there is Program specific software used to for national board examination preparation. Other Program software is web based which minimizes installation and upgraded issues. The laboratory is equipped with state-of-the-art critical care equipment. All the Program clinical sites provide access to all the technology used at patients' bedsides.

The software used in the laboratory setting is used in national examination preparation. Students have access in the fall and spring semesters during regular laboratory hours Monday through Friday and Monday through Wednesday during the spring semester. It was recognized that additional access was needed when faculty was not always available to monitor the laboratory due to teaching schedules. The software was added to the Sidney Silverman Library's open-computer laboratories but the students had to compete with other students for computer time. In 2015, the publishers updated the examination preparation software and moved it to a web-based platform. Since then, the College has purchased the web based preparation software that provides improved student access and satisfaction.

In addition to the computer software and hardware, the Program owns various other respiratory care technology including but not limited to two critical care ventilators, two non-invasive ventilators, three neonatal ventilators, three lung simulators with software, human simulation torso's and intubation heads, multiple intubation scopes, the new Glidescope intubation device, airway clearance device, hospital bed, and two hospital stretchers. Students learn how to use this equipment as they progress through the program.

The College recently purchased a human patient simulator, SimMan 3G to be used in the health professions programs. The SimMan 3G allows student to practice critical skills based on prebuilt or instructor controlled scenarios. SimMan 3G will allow students to interact and SimMan 3G will provide real-time neurological, as well as, physiological symptoms responses. Instructors will be able to create real-life situations in a controlled learning environment.

Each faculty has an office desktop computer with internet access, general software for word processing, presentation, and spreadsheet functionality. Course classrooms are scheduled in "smart rooms" to utilize internet, PowerPoint, and other multimedia needs. The faculty utilizes Moodle in courses and

BCC Academic Program Review, Respiratory Care – 2016

Page **41** of **52** 

routinely takes training courses offered through the Center for Innovation in Teaching and Learning. Faculty receive training through in-service as new technology and equipment is purchased.

## **Facilities and Equipment**

Yearly, the Program evaluates the current equipment inventory and discusses replacement or elimination. Currently, through a grant, the Program is replacing one critical care ventilator that is nearly ten years-old. Other equipment, such as, a non-invasive ventilator was eliminated from instructional use and replaced with a current generation unit. Other equipment is replaced when industry equipment providers no longer support or service their technology.

Each semester, the Program requests "smart room's" through College scheduling office for course lectures. The "smart rooms" provide the faculty and students to interact using technology. Faculty use the rooms to bring in clickers, virtual blackboards, and multimedia presentation.

Built in 2011, the Program occupies a laboratory located on the second floor S-wing. This updated laboratory met the growing program size and equipment storage needs. The laboratory now has three patient stations, student tables, and computer workstations. The patient stations have piped-in oxygen and air; mock suction units; and electrical outlets. These patient stations mirror a hospital's patient room and provide the students with a realistic patient room.

Beginning fall 2016, the Program will move to the new Health Professions building. Laboratory space will be similar to current laboratory. The Program will have access to the simulation laboratory, which will provide interdisciplinary and intra-program student development.

## Learning Resources

## Sidney Silverman Library

Through the Sidney Silverman Library, the Program maintains a large inventory of textbooks, medical journals, and multimedia resources available to faculty and students. During the first year, Library faculty provides students an orientation to the databases, journals, videos, and other learning resources available. Faculty routinely recommends purchasing new multimedia material for Program use.

Medical journal access through the Library include several top medical journals, such as, American Journal of Respiratory and Critical Care Medicine, Chest, European Respiratory Journal, Journal of Asthma, Respiratory Care, and Thorax. Additionally, faculty may borrow materials from other New Jersey colleges through the Virtual Academic Library Environment (VALE), of New Jersey. Multimedia videos include topics on pharmacology, neonatal, pediatric and adult assessment, and various therapy skill videos. All current Program textbooks are available for students.

### Center for Innovation in Teaching and Learning (CITL)

"The mission of the CITL is to empower faculty to continuously improve student learning outcomes through the appropriate and productive use of best practices in teaching and technology." Faculty consistently take course and programs offered through CITL, such as, the Summer Institute, Web-Enhanced Course, and other faculty development programs.

### Respiratory Care: Continuing Education

As a requirement for state licensure, continuing education is required prior to the biennial renewal period. The College support Program faculty attending continuing education conferences both locally and nationally. Faculty have taken courses in various areas, such as, program development, professional ethics, advanced technology, and patient care best practices.

Additionally, faculty have presented at local and national conferences. Since the last program review, faculty have attended the American Association for Respiratory Care Summer Forum, American Association for Respiratory Care International Congress (presented), New Jersey Society for Respiratory Care Annual Conference, (presented) New Jersey Society for Respiratory Care Spring Conference, and the New Jersey / New York Societies for Respiratory Care Manager and Educator Conference (presented).

### Adjunct Faculty Development

In 2014, in response to a new CoARC requirement, the Program developed a faculty development program aimed to improve inter-rater reliability (IRR). The IRR program consists of videos, questions, and feedback on assessment. Faculty watch students performing tasks and check-off the skills performed or not performed. Feedback is provided on the tasks not performed. Initially, the IRR program was Moodle based but technology issues developed throughout the first year. Since implementation, the program runs during the fall and spring adjunct-faculty conference.

Adjunct faculty are also encouraged to attend College sponsored faculty development conference held during the academic year.

## Marketing and Public Relations

In coordination with the College Public Relations Department, the Program developed a brochure use at Division Information Sessions, the Advising Center, career fairs to name a few. The brochure outlines the respiratory therapist role in health care, program curriculum and courses, program contact information, and program accreditation status. Additionally, posters were produces to promote the Program within the college and community.

The Program maintains a website containing admission requirements, Program frequently asked questions, faculty profiles, and Commission on Accreditation for Respiratory Care Annual Report Data. Prospective students can access the page by searching respiratory care from the BCC homepage or BCC Academic Program Review, Respiratory Care – 2016

through the academic division and departments' dropdown tab. CoARC required data is updated yearly on the Program website.

The Program Director attends each Division of Health Profession Information Session held throughout the year. During these sessions, prospective students learn about all the admission requirements and meet the faculty in person to discuss the Program. Program faculty are available to meet with high school students who may be interested in a healthcare career.

## Support Services

Throughout the Program, students are advised on their progress and the CoARC requires process to document student deficiencies. When advisement is indicated, faculty discuss with the student their strengths and weaknesses and from the discussion a plan is developed. Additionally, faculty are available during office hours or by appointment to meet with students.

## Tutoring

The Program recommends students receive extra learning assistance through faculty meetings or the college's Cerullo Learning Assistance Center. Faculty are available during their regular office hours and by appointment throughout the week. The college tutoring center is available Monday through Saturday offering one-on-one and study groups. Faculty recommends second-year students to serve as tutors. Primarily, the tutoring is peer-to-peer.

The tutor's assist students with their first year course work in pharmacology and introductory respiratory care. Second year students are advised to contact their course instructors or classmates for tutoring services. On occasion, recent graduates have provided tutoring for second year students.

## Career Development

The Career Development Center of Bergen Community College each semester hosts a career fair. information on these fairs and for other career opportunities are communicated to the students through email and Moodle postings. A course, Special Topics in Respiratory Care, will spend a class on resume writing and interviewing tips. A guest from either the Career Development Center or a local hospital manager will speak to the students about real-life skills.

## **Program Laboratory**

One area of weakness is laboratory access. The Program's laboratory is only available when faculty schedules permit. This has limited the students' ability to practice outside schedule laboratory time. Faculty have suggested photographing or video recording skills as being performed but this does not substitute for hands-on practice. This weakness still needs to be addressed.

## Resources, Budget

### Staffing

The Program is staffed by three full-time, tenure or tenure-track, faculty and thirty-seven adjunct faculty. One full-time faculty member serves as Program Director and another is Director of Clinical Education. All full-time faculty teach a minimum of fifteen contact hours per semester in didactic, laboratory, and clinical settings. All full-time faculty are offered overload each semester. Adjunct faculty serves in a variety of functions in the didactic, laboratory, and clinical settings. Primarily, the adjuncts serve as clinical instructors at the hospitals students complete their clinical experience.

#### **Operating and Capital Budgets**

The Program's operating budget includes staff salaries, laboratory supplies, office supplies, and equipment maintenance, repairs, and replacement. Faculty salaries vary based on academic rank and experience. Yearly, the laboratory supplies are purchased for upcoming semesters; primarily, the supplies are disposable items. In the last two years, one mechanical ventilator has needed several thousands of dollars in repairs. This machine is set for replacement this year. Other equipment is sent out for service as necessary. Faculty office technology is purchased through the College

#### Grants

The Program has received Perkins Grants and Center for Instructional Research and Development (CIRD) funding. In the past, the Program received grant funding to purchase new laboratory technology. The Program does not rely on grants for operational purposes. The Program continues to seek grant funding as new technology is developed and marketed in the workforce community.

The College received a General Obligation Bond to build a health professions building. The building will open the summer of 2016. The Program plans on using the new simulation laboratory and Program laboratory space begin in the summer of 2016.

## Data Needs

In the spring of 2016, through grant funding, the Program received new laboratory equipment. The Perkins Grant is funding the purchase of a new mechanical ventilator, a Covidien 980 and the CIRD grant funded a Fisher & Paykel Airvo High Flow Nasal Cannula. In the future, as new technology is marketed, the Program will have to apply for more grant opportunities to fund purchases of new equipment.

## Focus on Community

## **Community Groups**

### Community

The Respiratory Care Program (Program) routinely engages in community and support programs. Throughout the year, the Program reaches out to day-care facilities, Head Start programs, and other lung-health support groups offering their faculty education sessions. The Program students educate the faculty on medication administration, cleaning equipment, and basic assessment.

The Respiratory Care Club (Club) runs a number of education sessions at the college. The Club faculty advisors and students provide lung health assessments during Respiratory Care Week in October, Great American Smoke-Out in November, and Community Health Week in April. The students use all these activities as Service Learning opportunities.

Program faculty and students customarily support the Division of Health Professions Health Care in Suburbia programs. In past programs, faculty have participated during panel discussion.

Yearly, the Program supports the New Jersey Society for Respiratory Care annual conference. Students have the opportunity to learn about newest trends in health care, interact with therapists and managers, and socialize with students from other respiratory care programs.

Community Issues Related to Program

#### Employment Trends

According to the Bureau of Labor Statistics, "employment of respiratory therapists is projected to grow 12 percent from 2014 to 2024, faster than the average for all occupations." Projections Central – State Occupational Projections estimate an 11.9% increase in New Jersey, 14.2% increase in New York, and 19.6 increase in Pennsylvania. These data strongly support the need for respiratory therapists in the coming years.

Retrieved January 31, 2016 from <u>http://www.bls.gov/ooh/Healthcare/Respiratory-therapists.htm</u> and <u>http://www.projectionscentral.com/Projections/LongTerm</u>

Career One Stop is on par with employment projections both locally, regionally, and nationally.

#### State and National Employment Trends

	Employment		Percent	Projected
	2012	2022	Change	Annual Job Openings <sup>1</sup>
U.S.	119,300	142,100	+19%	4,010
NJ	2,990	3,350	+12%	80

NY	6,150	7,030	+14%	180
ΡΑ	5,180	6,190	+20%	180

<sup>1</sup>Projected Annual Job Openings refers to the average annual job openings due to growth and net replacement.

## Funding

### Student Funding Support

In the past, the Health Professionals Opportunity Grant (HPOG) provided funding for student expenses. During 2014 and 2015 academic year, a number of students received HPOG funding for their education. In addition to the Program service learning opportunities, students who received HPOG funding completed additional service for each semester that funding is received. Additionally, students receive scholarship opportunities through the BCC Foundation, American Respiratory Care Foundation, the Commission on Accreditation for Respiratory Care, and New Jersey Society for Respiratory Care. Each of these groups provides different avenues to support a student's education.

### Program Funding Support

In 2011, the College supported the design of a new respiratory care laboratory, as the Program had outgrown the old laboratory space, as enrollment increased. Aimed at meeting the needs of a changing profession, a new lab was designed with faculty input. Currently, through state grant funding the College is building an Integrated Health Professions building that will permit the Program to continue to remain on the cutting edge of technology and student engagement.

Further Program funding is supported through Perkins Grants and Center for Instructional Research and Development (CIRD) funding. Yearly, the Program applies for funding to update the technology in the laboratory. In the past, the Program received funding to purchase a new technology nebulizer, updated pulmonary function testing equipment, and most recently a high-flow cannula system and new mechanical ventilator.

## **External Requirements or Considerations**

#### Accreditations

The Respiratory Care Program (Program) is accredited through the Commission on Accreditation for Respiratory Care (CoARC). "The CoARC accredits entry into professional practice programs in respiratory care at the Associate, Baccalaureate, and Master's Degree level in the United States." (Retrieved January 31, 2016 from <u>http://www.coarc.com/6.html</u>). The Program, in 2011, completed its self-study and on-site reaccreditation visit. The entry into professional practice standards focuses on five

standards: Program Administration and Sponsorship; Institutional and Personnel Resources; Program Goals, Outcomes, and Assessment; Curriculum; and Fair Practices and Recordkeeping.

### Licensure

All Program faculty are licensed by the New Jersey State Board of Respiratory Care or State of New York, Division of Professional Licensing Services, Respiratory Therapy Unit or both. The practice of respiratory care is regulated in both states requiring the licensure of all full-time and adjunct faculty. Upon successful Program completion, graduates are eligible to apply for licensure in all states requiring licensure.

### **Professional Organization**

The Program maintains a close relationship with professional officers at the local and state level. Currently one faculty member is a state delegate to the national organization. Professional involvement is encouraged by all faculty. Additionally, student involvement in the state organization as increased over the years.

### Advisory Committee

The Commission on Accreditation for Respiratory Care (CoARC) requires the Program to maintain an Advisory Committee (Committee). The Program's Committee is composed of students, graduates, faculty, college administration, employers, physicians, and the public. Their role, as the CoARC defines, is to "assist program and sponsor personnel in reviewing and evaluating program outcomes, instructional effectiveness, and program response to change along with addition of / changes to optional program goals." The committee currently meets annually to discuss these and other program topics.

Annually, the Committee is administered a Personnel-Program Resource Survey. The survey asks general and specific questions regarding the medical director's role, classroom and laboratory space, and learning, financial and clinical resources. The survey results have always been favorable to the program.

Member	Position	Role	Term
Jon Africano	Director, St. Joseph's Hospital and Medical Center Paterson, NJ	Member	Current
Reyna Berroa	Director, Hackensack University Medical Center Hackensack, NJ	Member	Current
Kenneth Capek	Director, Bergen Regional Medical Center Paramus, NJ	Committee Chair	Current
John Campbell	Director, Newark Beth Israel Medical Center Newark, NJ	Member	Current

#### Committee members

Amy Ceconi	Program Director Bergen Community College	Faculty	Current
Bruce Gelotte	Director, Hackensack University Medical Member Center Hackensack, NJ		Expired in 2015
Deborah Goss	Physician Hackensack, NJ	Medical director	Current
Kelly Horgan	Director of Clinical Education Bergen Community College	Faculty	Current
Sung Hee Kim	2015-2016 Student Representative Bergen Community College	Graduate	Current
David Kruse	2014 Graduate Representative Bergen Community College	Student	Expired in 2015
John Landwersiek	Patient <i>Clifton, NJ</i>	Public	Current
Sandra McCleaster	Adjunct faculty Bergen Community College	Faculty	Current
Jean-Herve Mondestin	Director, The Valley Hospital Ridgewood, NJ	Member	Current
Caron Morrow	Director, Holy Name Hospital Teaneck, NJ	Member	Current
Nicole Olivio	Director, Englewood Hospital and Medical Center Englewood, NJ	Member	Current
Ed Peters	Director, The Wanaque Center Wanaque, NJ	Member	Current
Mike Pruss	Director, Good Samaritan Hospital Suffern, NY	Member	Current
Bruce Shafer	Director, Chilton Memorial Hospital Pompton Plains, NJ	Member	Current
Catherine Sullivan	Director, Nyack Hospital Nyack, NY	Member	Current
Maurico Vega	2016 Student Representative Bergen Community College	Student	Current

# Data Needs

Currently the advisory board committee is comprehensive and represented by all members of the thirteen clinical sites.

# Summary

## Program Achievements, Progress Made Since Last Review

The major achievements, changes, and implementations since the last review are as follows:

- All courses utilize Moodle rooms for enhancement and all exams.
- Annual course content review and update to new information as needed as defined by the CoARC published standards for respiratory care and the NBRC exam content matrix.
- Annual update of the student Policy and Procedure manual.
- Utilization of the web based on line respiratory care program exam review courses
- New state of the art laboratory with new equipment as per grant funding.

## Mission / Goals / Objectives

The Program meets and achieves its goals, objectives and fulfills its mission. The students receive a comprehensive and diversified education that provides the knowledge and skills necessary to graduate from an accredited program, prepare them for licensure, and employment. Students are encouraged to pursue life-long learning and / or advanced degrees

Both the institution and the department are committed to service. All students participate in the Service Learning program at Bergen Community College. A variety of community outreach activities and programs are planned throughout the two years of the Program.

The Program is currently pursuing the development of clinical smoking cessation program at several clinical sites that offer this type of learning opportunity. The DCE is working on developing this program at The Valley Hospital as well as other education activities at several clinical sites.

Outcomes are measured by:

- Individual faculty assessments
- Student program resource surveys
- Employer program resource surveys
- Graduate program resource surveys
- Course examinations
- NBRC program exit exam results
- NBRC Annual School Summary Report
- CoARC Annual Reporting Tool and published thresholds for success

## Strengths

The employment data previously mentioned strongly support the need for respiratory therapists in the coming years and the projected growth rate in New Jersey is 14%. The Program produces a strong graduate who is fully prepared to meet the workforce needs of our clinical affiliates.

Other strengths include:

- State of the art laboratory; web based computer programs to offer the students an opportunity to be fully prepared for program exit and NBRC national board licensing exams.
- A Dean who is dedicated to all program in meeting their goals and outcomes by providing the program leadership with the tools to manage their program effectively to achieve the concept of the "next generation of health care practitioners'
- A president and administrative team dedicated the success of all students in the program and all other health care disciplines.
- Faculties who are abreast of new trends and changes in respiratory care technologies and equipment

# Challenges

The growing needs in the healthcare sector present new challenges within our clinical sites as patient lengths of stay continue to decrease and more needs are arising in outside areas of employment such as long-term acute care facilities. The Program needs to annually review the clinical sites for their ability to meet the demands of the student / patient population to facilitate learning outcomes. The new integrated learning center will assist the Program with meeting the Program objectives.

## Celebration and Recognition

- Amy Ceconi Program Director was awarded the 2012 Beacon Conference Presenter Award along with a graduate of the class of 2012 Mrs. Anna Sicilia.
- Annually a graduate receives the NJSRC Scholarship
- Another positive outcome for the Program is the percent pass rate for the certification in respiratory care. In 2015, 84% have passed the CRT exam and 64% has passed the RRT exam.

## Recommendations for Change

The Respiratory Care Program will be moving into the new Health Professions Integrated Learning Center in May of 2016 and will be housed with all the health professions programs on the Paramus campus. This will include the addition of the new integrated simulation teaching and learning center for collaborative learning between programs, students, and faculty. Additionally, an ongoing evaluation of the curriculum must continue to facilitate changes needed to keep the Program and courses current. Course content must be reviewed periodically to assure consistency throughout the program and any changes needed to be implemented.

## Action Plan

The table presents the following program goals and objectives for the future, improvements planned, changes taking place, responsible parties, timeframes, resource implications.

Goal	Objective:	Timeframe	Responsible Parties	Resource Implications
Engage the students in smoking cessation education programs in various clinical sites that offer this opportunity.	Meet the CoARC standards of promoting cardiopulmonary wellness, disease prevention, and disease management.	Spring 2016 – Spring 2018	Program Director, Director of Clinical Education, full- time faculty members, select clinical adjunct faculty.	Utilize resources directly from the clinical site.
To create a collaborative learning project with other health professions departments on simulation case studies.	Meet the CoARC standards of developing the student's critical thinking skills and problem solving abilities.	Spring 2016 – Spring 2018	Program Director, Director of Clinical Education, full- time faculty members, select clinical adjunct faculty.	Utilize the new simulation learning center.