

THE HISTORY OF THE RESPIRATORY THERAPY PROGRAM AT OZARKS TECHNICAL COMMUNITY COLLEGE

FROM HUMBLE BEGINNINGS TO MILLIONS OF TOUCHED LIVES

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The Respiratory Therapy Program at Ozarks Technical Community College has served the Springfield community and Southwest Missouri for nearly 46 years. Recently, the program received approval from the Missouri Coordinating Board for Higher Education to offer bachelor's degrees at two OTC locations – Springfield and Waynesville. Two more approvals from national accrediting agencies and it will be official.

This is a significant and remarkable accomplishment in the program's long history dating back to 1975, the year the program started as a collaboration between Graff Area Vocational Technical School and Lester E. Cox Medical Center (currently Cox North).

Background – The 1970s

Around the time the program began, most respiratory therapists were trained on the job. There were no educational requirements to be a respiratory therapist and licensure was years away. However, this was also a period of expansion and increased accountability, requiring respiratory therapists to be better educated in order to keep up with the myriad of new procedures and technology.

A new mode of ventilation – intermittent mandatory ventilation (IMV) – had just been invented requiring therapists to use their MacGyver skills to “transform” the most common ventilator of the era, the MA-1, into an IMV capable ventilator. In addition, therapists were performing more intricate ventilator checks to include compliance monitoring and best PEEP calculations. Also, more and more departments were performing blood gases, which required a firm understanding of cardiopulmonary physiology.

As the author remembers it, respiratory therapy in the seventies was ever changing. There were new inhaled medications coming out such as metaproterenol, Bear 1 and Ohio 560 ventilators were introduced, oximetry became commercialized, and in general, there seemed to be shift in what respiratory therapists were expected to know. No longer just someone to “check the oxygen”, respiratory therapists were now becoming valued and contributing members of the healthcare team.

Everything Starts with an Idea

The initial idea for establishing a program was the product of conversations between Mr. David Tucker and Dr. James Coulter early in 1975. Mr. Tucker was the director of the respiratory care department at Cox Medical Center and Dr. Coulter was one of the first pulmonologists in Springfield and one of medical directors for the respiratory care department.

At the time of the initial discussions, St. John's Hospital in collaboration with Southwest Missouri State University (now Mercy and MSU), was about to graduate its first class of registry eligible respiratory therapists but there were only three in the class (including the author) and ten scheduled to be in the next class. “With the increased demand for qualified respiratory therapists, we quickly realized that the community could easily support two programs in order to meet the needs of area hospitals,” said Mr. Tucker.

There's a New Program in Town

By the summer of 1975, officials at Graff Vo-Tech had agreed to provide educational credits and in December of that year the first class began studies. There were twelve students in the initial class and courses were taught in the Graff "A" Building, now Lincoln Hall.

The program was a one-year certification program and was approved by the Joint Review Committee for Respiratory Therapy Education (JRCRTC), now the Commission on Accreditation for Respiratory Care (COARC). Graduates from the program were eligible to sit for the Certified Respiratory Therapy Technician Exam. The term "technician" was later dropped and now the exam is simply known as the Certified Respiratory Therapist (CRT) exam.

In that first year, total tuition was \$300, and students were not required to buy textbooks. Instead, students researched various topics pertaining to respiratory care, essentially creating the curriculum for future classes. Clinical rotations were primarily at Cox, but students also spent time at Park Central (Lakeland) and the Missouri State Chest Hospital in Mt. Vernon (now closed).

One of the students in that first class was Martin Rohrer, System Manager for the Respiratory Care Department at CoxHealth and Director of the Pulmonary Function Lab at Cox South. In 1975, he was in the process of working on a Bachelor's in Business when heard about the program. "I figured I could take a year off, get certified in respiratory therapy, which would let me earn enough to finish college." "Which I did," he added. After graduation, Mr. Rohrer went to work for Cox and later furthered his education earning credentials as a registered respiratory therapist and certified pulmonary function technologist. He is still there today, after 45 years.

Growing Pains

The program survived growing pains in the first few years of operation but ended up on solid footing thanks to the efforts of Dr. Steven Bishop who took over the program in 1982. It was around this time that the program relocated to the Graff "B" Building, now Graff Hall.

At the ten-year anniversary in 1985, the program had graduated a total of 144 certification eligible respiratory therapists.

The year 1985 was important for a couple of other reasons. That year marked the closure of the St. John's/SMSU program leaving the Graff/Cox program as the only one in town. Also, Cox South Hospital opened its doors adding a little over 500 beds and significantly increasing the bed capacity in Springfield. Therefore, with the increase in potential patients and decrease in potential respiratory therapists to care for those patients, it became even more important to recruit and retain high quality students in order to meet the needs of the community.

Affiliation with Drury

In 1988, the program's advisory board and JRCRTE approved an optional one-year extension making the program a "one plus one." Students now had the choice of graduating in one year and obtaining the CRT credential or attending a full two years making them eligible to sit for the Registered Respiratory Therapist (RRT) exam. "We wanted to add a therapist level to the existing technician program since the level of patient acuity and critical thinking required in respiratory therapy was increasing," said Dr. Bishop.

With the change, the program now offered an Associate in Applied Science in Respiratory Care through Drury University and became known independently as the Southwest Missouri School for Respiratory Therapy.

Students opting for one year received a certificate from Graff. Those opting for two years received a diploma from Drury. Also, with the change, St. John's Hospital was added as a clinical affiliate enhancing the students' clinical experience.

The alliance with Drury proved to be a great example of how the community worked together to fill a need. "Drury was great to work with and they even lowered the tuition just for the respiratory therapy students," said Bishop.

OTC Opens its Doors

The next big change to the program occurred in 1991 with the opening of Ozarks Technical Community College. Due to the shortage of classrooms and until new construction was completed, the College leased space from Cox North. The respiratory therapy program was one of several allied health programs that moved to this location.

The program remained a one plus one, but Drury was replaced by OTC as the educational affiliate and the program was renamed to reflect OTC as the primary institution. All graduates received a diploma from OTC regardless of if they attended one year or two years.

Change in Status

In 1994 the program changed its status from a one plus one to a straight two-year program. This change coincided with the national push to eliminate one-year technician programs in favor of two-year therapist programs as the minimum standard for entry into the field of respiratory care.

In order to accommodate this change, the program closed during the spring semester of 1994. The last one plus one class graduated in December of 1993 and the first group of students in the new two-year program started in June of 1994.

The new two-year program had a unique curriculum. Instead of having general education courses mixed in with the technical courses, completion of prerequisite courses was required in order to be admitted to the second year of the program. This allowed students to complete prerequisite coursework at their own pace and then be able to concentrate on respiratory therapy classes for the final three semesters of the program. The curriculum was a success and is still in place today.

Time to Move Again

In 1997, the program moved once again (this time to the OTC location at North Town Mall) and in 2001 after the remodeling of Lincoln Hall, the program moved back to its original location albeit with newer surroundings. The program had come full circle.

It was in this time period that the program was experiencing exponential growth. Additional clinical sites were added, state-of-the-art laboratory equipment was acquired, and new faculty was hired to help with lab and clinical instruction.

Research It

In 2006, students in the program started performing research. There were six projects in that first year. "We felt that having the students do research offered them the opportunity to learn how to think through problems and help answer questions based on real or simulated clinical scenarios," said Dr. Aaron Light, Respiratory Care Program Director.

Since beginning the research program and as a testament to its success, faculty and students have published 47 abstracts in the journal *Respiratory Care*.

Research projects are typically performed in the spring semester and are designed to be team oriented, usually with three or four in a group plus a faculty advisor. One member in each group is designated the team leader. From 2006 to 2020, all project team leaders were invited to present their findings at the annual American Association for Respiratory Care International Congress held at various locations across the United States.

One of those team leaders was Mr. Brandon Burk, a 2009 graduate of the program and now the Director of Clinical Education. “Presenting original research at the world’s largest respiratory care conference is a once in a lifetime opportunity. It teaches students professionalism and allows them to demonstrate courage while defending their project.” He added, “It also helps them understand that respiratory therapy is so much larger than our little bubble here in Southwest Missouri.”

Passing the Torch

In 2015, after a 46-year career in respiratory care and 25 years at OTC, the author retired as program director and passed the torch to two younger but highly capable individuals – Aaron Light and Brandon Burk.

During this time, more changes were made to the program including digital tracking of clinical activities, student scheduling for most clinical rotations, and expanding articulation agreements with two universities, changes initiated by Light and Burk.

If there was ever a common thread, it would be that the program has always stood ready to respond to the needs of the student and the needs of the community. Few programs, if any, start out as a one-year program, transition to a one plus one, then a two-year, and end up as a bachelor’s program. Quite a story to say the least.

Final Thoughts

Since that historic meeting between founders Tucker and Coulter, one thing has not changed: the goal of providing a high-quality education and ensuring that graduates can deliver safe and competent respiratory care. A tribute to this mission is evidenced by the fact that the respiratory care program at OTC is the ONLY two-year program in the nation to receive the COARC Distinguished RRT Credentialing Success Award every year of the ten years it has been offered.

As a final thought, consider that since 1976, the program has graduated a total of 660 respiratory therapists. Assuming each respiratory therapist could easily care for 50,000 different patients over a long career, the result is that tens of millions of patient lives have been touched in some way by alumni of the program. Something that would not have happened had it not been for the perseverance of so many involved.

“When you touch minds, people are willing to walk a dozen miles for you; and when you touch hearts, people are willing to walk a thousand miles for you; but when you touch souls, people are willing to walk a million miles for you.” — Matshona Dhliwayo

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