Respiratory Care Programs Find Synergy

CoARC's New Accreditation Program for Polysomnography
by Debbie Bunch

We spend about a third of our lives doing it, but it's been only in the last 20 years or so that medical science has really taken an active interest in how sleep might be affecting our health. But as the mysteries surrounding sleep have finally begun to unravel and we've learned more and more about sleep disordered breathing and other sleep-related health problems, the demand for sleep testing has gone through the roof. Sleep centers in many places are booked months in advance, and finding qualified personnel to staff these centers has become a major challenge.

Given their background in the respiratory system, respiratory therapists for years have been filling polysomnography positions and, indeed, make up a large portion of the sleep testing workforce. But even the best therapists will tell you there's a steep learning curve for anyone who takes on the task. Training programs specific to sleep technology have been few and far between, and standardization of these programs has been fragmented at best.

Thanks to a new polysomnography accreditation program developed specifically for schools of respiratory care by the Committee on Accreditation for Respiratory Care (CoARC), that's changing. The new program, which was spurred by requests from the AARC, went online in the spring of 2005 when initial accreditation was granted to polysomnography programs at Stony Brook University in Stony Brook, NY, and Tallahassee Community College in Tallahassee, FL. Just one year later, there are 13 accredited programs now available nationwide, and more are waiting in the wings.

More than one way
The flexibility built into the CoARC accreditation program is facilitating its success. Respiratory therapy programs have the option of offering the training as an add-on certificate program for health professionals with at least an associate's degree in a related field or incorporating it into an existing respiratory therapy program. Most associate degree respiratory therapy programs are selecting the first option, while baccalaureate programs are choosing the second, adding the polysomnography component into their existing curriculum as a separate track. In some cases, programs are going both ways.

At Youngstown State University (YSU) in Youngstown, OH, program director Louis N. Harris, EdD, RRT, CPFT, has incorporated the sleep training into his BSRC program as a senior year option and also makes the program available to area clinicians who have earned at least the CRT credential. The same is true at the University of Alabama (UAB) at Birmingham, where Wesley Granger, PhD, RRT, will be offering the training as a specialty track in the last two
Texas State technologist Josh Marshall, RPSGT, gives patient education to Audrey.

Keene’s program, which operates under the add-on model, began in January and is currently training 11 students — most with a respiratory therapy background. “Most of them are looking for dual credentialing and expanded job opportunities,” he says.

Same modalities, different application

All six students in the add-on program at Catawba Valley Community College (CVCC) in Hickory, NC, are RRTs currently working in the community as therapists, says Program Director Catherine Bitsche, MA, RRT-NPS. They started the program last summer and will graduate this month.

Sarah Hoffman, REEGT, RPSGT, who serves as faculty for the program, says respiratory therapists are a natural fit for polysomnography because they are “already out there being cross-trained on the different modalities.”

Alvin Community College students Jacob Thomas (left) and Yolanda Lopez (right) go over a study with the program’s medical director, Dr. Daniel Glaze.

University (ETSU) in Johnson City. “The program tuition made it financially viable, so the university needed very little convincing to proceed.”

The UAB program has yet to enroll students, but the YSU program kicked off last fall after Dr. Harris and his colleagues presented the concept to their advisory board. A shortage of qualified sleep technologists in the area, student requests for the program, the availability of existing equipment in the respiratory care lab, and the fact that the course could be taught by part-time faculty all figured into the approval.

Other programs cite similar reasons for beginning the training. “The respiratory therapy advisory board decided to start a polysomnography program last fall to address the community need for trained polysomnography personnel,” says Shane Keene, MBA, RRT-NPS, CPFT, assistant professor and director of clinical education at East Tennessee State.

semesters of his BS program. He is also planning an eight-semester add-on certificate option for RTs in the community who want to specialize in sleep.
YSU instructor Mark Beebe, RRT, RPSGT (left), explains a concept to student Jennifer Steinbach.

job.” Despite having a great foundation for sleep, however, both she and Bitsche emphasize specific training in polysomnography is necessary for RTs to become experts in the field. “They benefit in the course with their knowledge of oxygen therapy and capnography, but now they are applying those in a completely different way,” says Hoffman. She and Bitsche say their students have been particularly amazed at
Student Lacey Snell prepares Angela Broyles for a sleep study in the ETSU program. How a well performed sleep study can really change a person’s life.

“This was best demonstrated when we had a volunteer for our program have a mock sleep study who had extremely severe apneas,” says Bitsche. The volunteer was then placed on continuous positive airway pressure (CPAP) and initially balked at the treatment; but the students were able to apply the skills they had learned in the program regarding dealing with such adversity and managed to convince the woman to give the treatment a try, demonstrating improvements in clinical parameters. “The final high point for the students was hearing how much better she felt,” says Hoffman, “and that she was going to her physician for a real study and treatment.”

Excellent prospects

Some of the polysomnography programs that have earned CoARC accreditation have actually been in business for several years already but have welcomed the opportunity to meet national standards. “I believe it is important for educational programs to be accredited so that there is consistency in curriculum,” says David A. Lucas, MS, RRT-NPS, AE-C, program manager of respiratory care and polysomnography at Cuyahoga Community College in Parma, OH. “Accreditation adds ‘formality’ to an educational program.”

Cuyahoga has been offering sleep training since 1998 in a one-year add-on program consisting of 36 semester hours. The program has enrolled about 100 students since its inception, and Lucas says everyone who has graduated has had no trouble finding employment in the field. “It was funny to reflect back when the advisory committee was involved in the development of our curriculum,” he notes. “Many on the committee stated that after one graduating class, we would flood the market with potential technologists. That was back in 1998 and employment remains excellent.”

Tom Smalling, MS, RRT, RPFT, RPSGT, FAARC, and his colleagues at Stony Brook have been in the business of training people in sleep since 1998 as well, but welcomed the new CoARC accreditation options as an opportunity to
expand their continuing education program into a full-fledged certificate program offered as a specialty track to seniors in their BSRC program. As one of the first two schools to earn the accreditation, Stony Brook served as a model for the program; and Smalling—who also chairs the AARC's Sleep Specialty Section—was instrumental in helping develop the standards. His first group of students graduated last year and found a wealth of job opportunities. The second class is set to complete the program this spring. "Students want to be more versatile and well-rounded and believe that training in polysomnography helps them achieve that goal," he says.

Most of the students enrolled in the programs covered in this article are RTs or other health professionals interested in moving into sleep from other practice settings, but programs are also enrolling sleep professionals already working in the area who desire more formal training. That's the case at Alvin Community College in Alvin, TX, where Marby McKinney, BS, RRT-NPS, CPFT, says her initial group of four students includes two RTs, a licensed vocational nurse, and a physician. "One of our students is already in the field. She is working part time and feels she needs better training to pass her boards."

Proceed directly to credentialing

McKinney's comment about passing the RPSGT exam offered by the Board of Registered Polysomnographic Technologists (BRPT) is echoed by virtually all of the educators involved in these programs, who emphasize one of the key factors in favor of earning CoARC accreditation is the fact that it allows their graduates to immediately sit for the exam, rather than having to meet a practice requirement.

"Interest in our nine-month program appears to stem from individuals desiring a strong polysomnography theory preparation for the board exam and the ability to immediately sit for the BRPT exam upon completion of the polysomnography program without serving a paid internship," says Gregg Marshall, PhD, RRT, chair and associate professor of the BSRC and polysomnography programs at Texas State University in San Marcos. His add-on program, which will begin this fall, is filling that need in even more ways than seen at most schools, offering not two but three options—therapists with a bachelor's degree may attend a graduate-level program leading to a master's degree, those without a bachelor's degree are eligible for an undergraduate level program, and those who are credentialed in a health care profession other than respiratory therapy may attend a bridge option. The graduate-level program consists of 18 hours, which may be applied to the school's Master of Science in Interdisciplinary Studies degree, a program that allows students to combine coursework from any three colleges within Texas State for a customized degree plan.

Clinical sites climb on board

All of the students in the Texas State program will benefit from an in-house sleep lab built especially for the program. "In support of the CoARC accreditation option for

Rebecca Smith, a student at Texas State, identifies respiratory-related arousals on her patient.
polysomnography, the university funded the construction of a two-bedroom sleep lab in the Health Science Center," says Dr. Marshall. "The 1,000 square-foot, state-of-the-art sleep lab was equipped by communities of interest with more than $85,000 of gifts-in-kind." The lab is already playing a role in respiratory care training and research and will be the mainstay of clinical education for the polysomnography students.

Stony Brook has a similar, one-bed lab that was also equipped in part with outside donations of equipment and supplies in 2003. "This milestone was made possible with financial and capital equipment support from our dean’s office and from donations of equipment and supplies from several health care businesses totaling more than $200,000," says

Tom Smalling. At both universities, these onsite labs will augment outside facilities. Most schools, however, rely solely on clinical affiliates for their clinical training and say they’ve had no problem convincing sleep centers to get on board with their programs. "We have clinical contacts with seven facilities," says ETSU’s Shane Keene. "The facilities realize they have a vested interest in the success of the program, and they are the biggest reason the program was started."

Catherine Bitsche, from CVCC, says labs in her community have literally flocked to the program. "All the local labs want to be affiliated with the program to try to entice our students to come to work for them."

**Maximizing connectivity**

As the nation learns more and more about sleep-related health problems, the demand for sleep testing is bound to rise even faster than it is today. The new polysomnography accreditation program available from CoARC is taking advantage of the synergy that exists between polysomnography and respiratory care to help ensure the technologists who staff these labs are well-trained professionals with the specialized knowledge necessary to deliver the best possible testing and treatment.

"National surveys have suggested greater than 70 percent of RPSGTs also hold an NBRC credential," says Dr. Marshall. "The connectivity between the two professions is profound, and cross-teaching between respiratory care and polysomnography is cost-effective from an educational point of view."

"Respiratory therapy students and graduates have a unique, comprehensive, and adaptable set of skills and knowledge that can — with additional training — transfer into the polysomnography work environment," says Tom Smalling. "Respiratory therapy programs have already established the support structure for educating health professionals and just need to secure the faculty and clinical sites to establish this optional accredited program."