

# Respiratory Therapy Takes Root in Europe with German RT Programs

by Gene Gantt, RRT, and Dr. Thorsten Hardebusch

In 2004, an article in the journal *Pneumologie* introduced a new profession in Germany — respiratory therapist. The abstract defined the practice of respiratory therapy as follows: “The profession ‘Respiratory Therapist’ was created in the United States 50 years ago. We intend to introduce this profession also in Germany. We follow many other countries who have already taken this step. We hope that we can reach yet a higher quality of patient care.”<sup>1</sup>

The mission to develop respiratory therapy in Germany was spurred by a shortage of physicians in the country. Without enough physicians to go around, health care leaders were engaged in a discussion about the delegation of physicians’ duties to other health care professionals. With the publication of the *Pneumologie* article, the first respiratory therapy students took a leap of faith and entered the first program.

A subsequent article, also in *Pneumologie*, was published in 2008. “The Respiratory Therapist: Practical Experiences One Year after Implantation” highlighted the accomplishments that had been made in the development of the profession, stating, “It is strongly recommended to the heads of medical departments and the human resources managers of hospitals that they should recognize the increased qualifications of ... respiratory therapists by appropriate remuneration.”<sup>2</sup>

While the debate over pay continues — the profession must be officially recognized before RTs can earn salaries on a par with their training — the field is definitely off and running.

### Four education centers

Currently, there are four respiratory therapy education centers in Germany. The first class started in 2005 in Gauting, which is near Munich. The other locations are in Bad Berka (Eastern Germany), Grosshansdorf (Northern Germany), and Luedenscheid/Schmallenberg/Hemer/Dortmund/Solingen (Western Germany). So far, 99 students have graduated from these programs.

In order to apply for the program, an applicant must be either a certified nurse or certified physiotherapist and must have either two years of work experience in a hospital or at least one year of experience in a department or institution specializing in pulmonary medicine. Between 70–80% of the students so far have entered the program with many years of experience in intensive care.

The RT training program consists of 600 hours over a two-year period. Theory is taught during classroom sessions, and practical learning takes place in specialized departments. Both written and oral exams are given at the end of the course, and students must also write a 20–25 page paper. The oral exams and evaluation of the papers are the responsibility of the course leaders, which usually includes the head of the department and an attendant. Each program also tries to include at least one person from one of the other training centers as well, in order to establish a baseline in grading and ensure the level of education is the same in every training center. While the different training centers emphasize a little different content, the curriculum taught in the classes is absolutely comparable, something considered essential because comparable training is a precondition for becoming a recognized profession. The cost of the program is 5,000 euros.

Most German graduates are practicing in the ICU, but some are also working on pneumology wards. Only a few are practicing in a sleep laboratory, pediatrics, and home care. They work under the supervision of a physician, which means they have to speak to the physician about what they want to do with the patient and get the physician’s permission when they want to follow a special weaning strategy, do special procedures, etc. They can write orders to be co-signed by a physician, if this is allowed in the hospital or on the ward.

### Enthusiastic students

Since respiratory therapy has yet to be officially recognized as a profession in Germany, the RTs who have

completed the program are generally paid as regular nurses. As noted earlier, the hope is that once the profession is recognized, these RTs will qualify for higher salaries based on their additional training.

Most of the participants, however, have entered the program not because they are seeking higher pay, but because they are interested in learning more about respiratory care. Instructors report the students soak up everything presented in class, which creates a great classroom atmosphere. Most of the lectures are adapted from lectures used in medical school or postgraduate education, so they are very detailed and on a very high level.

The theory modules are very compressed, and the participants more or less work from 8 a.m. to 5 p.m., with only short breaks. Many of the students have been out of the classroom for quite a while and have to get used to learning in class again, but they are very enthusiastic about the program. Sometimes when instructors try to fit in additional information — such as demonstrating a new device — the students will even sacrifice their lunch break or stay longer than planned just to get a little more information.

Right now, there are more nurses in the respiratory therapy classes than there are physiotherapists, and the nurses have somewhat of an advantage because of the knowledge they have already acquired during nursing school and on the job. However, instructors report the physiotherapists are doing well in the program too, although the curriculum is tougher for them.

### A growing demand

While the future of the profession in Germany is still uncertain, proponents are already seeing a growing interest among health care workers. For example, it was initially a challenge to recruit people for the course, but now the classes are sold out about six months in advance. The class that began this fall had a waiting list dating back to last May, and people were already applying for the class scheduled to begin in the spring of 2010.

Five years after the first article on the new respiratory therapy training in Germany was published, more and more head physicians, especially pneumologists, anesthetists, thoracic surgeons, and hospital managers understand the importance and the benefits of a specialized respiratory therapist. Although still an experiment, respiratory ther-



Students in the respiratory therapy program at Luedenscheid, Germany, are enthusiastic about their program, even sacrificing lunch breaks or staying longer than planned just to get a little more information.

apy in Germany has a good chance to be established as a valuable profession in the German health care system. ■

#### ABOUT THE AUTHORS

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#### REFERENCES

1. Karg O, Bonnet R, Magnussen H, et al. Respiratory therapist: introduction of a new profession [Article in German]. *Pneumologie* 2004; 58(12):854-857.
2. Karg O, Bubulj C, Esche B, et al. The respiratory therapist [Article in German]. *Pneumologie* 2008; 62(11):685-689.



In October 2008 a delegation from the AARC visited the Eibl Ventilation and Weaning Center in Berlin operated by the Linde Group. From left are Toni Rodriguez, EdD, RRT, 2007–2008 AARC president; Gene Gantt, RRT, AARC Long Term Care Section chair; Konrad Bengler, from Linde Global REMEO Ventilation; Michael Runge, BS, RRT, 2006 AARC president; and Thomas J. Kallstrom, BS, RRT, AE-C, FAARC, AARC chief operating officer.



Dr. Thorsten Hardebusch

## The German Education

Here's a brief look at the curriculum being used to train German health care professionals in respiratory therapy:

**Content of Theory Part 1:** anatomy, physiology, pathophysiology, clinical examination, pathology, clinical examination, allergology, pulmonary function and exercise testing, blood gas analysis, radiology, ultrasound (pleural effusions, pleural empyema), sleep medicine, bronchoscopy, blood work, and microbiological basics

**Practical Training (10 days):** bronchoscopy (3 days), pulmonary function testing (3 days), sleep laboratory (3 days), microbiological laboratory (1 day)

**Content of Theory Part 2:** pharmacology, oxygen therapy, inhaler therapy/aerosols, accessories and aids, physiotherapy/clearance of secretion, psychosocial care, chest tubes, social legislation, thoracic surgery, hygiene, instructioning (teach the teacher)

**Practical Training (10 days):** pneumology (on a pneumological ward, working mainly with patients with COPD, pneumonia, interstitial lung disease, and lung cancer, 5 days), physiotherapy (2–3 days), thoracic surgery (rounds and OT, 2–3 days)

**Content of Theory Part 3:** invasive and noninvasive (NIV) mechanical ventilation, airway management, monitoring, gas exchange, hemodynamics, critical care, rehabilitation, mechanical ventilation in the home care setting

**Practical Training (20 days):** ICU (10 days), ventilation at home (in the hospital on specialized wards/working with NIV/tracheostomized patients who are planned to be ventilated at home (5 days), rehabilitation (5 days)