

Continuing Education for Better Operational Competence

Especially in the rapidly developing field of healthcare, continuing education is an essential success factor. Having the edge in knowledge is attractive for hospital administration and physicians alike. But the programs offered must be precisely tailored to the needs of physicians. With its intensity and orientation towards practical experience, the Siemens Continuing Education Program seems to suit the participants of the Echo Basic Course in Essen, Germany.

By Matthias Manych



At 10 a.m., every seat in the classroom is already occupied. The 27 participating physicians work, for the most part, in hospitals or as general practitioners in private practice. Some of them are at the beginning of their professional careers, while others are already very experienced. For that reason, the individual expectations about this course are widely diverse. Caroline Pitz, Resident in Internal Medicine at St. Josefs Hospital, Dortmund-Hörde, for example, is most interested in the basics of echocardiography, in order to, as she says, "allow me to work on the topic more intensively at our hospital." On the other hand, Georg Schmidt-Brücken, MD, is interested in more specialized questions. In regard to his motivation for taking the Echo Basic Course in Essen, the Senior Physician at the Evangelisches Krankenhaus (Protestant Hospital) in Unna says, "The clarification of unclear findings is truly challenging. I want to

improve my skills in this area and learn about new guidelines and standards. I'd also like to find out in which areas we might still be clinging on to old, long outdated perceptions at our hospital." He expects that his newly acquired knowledge will also improve procedures at the hospital in the future.

This time, Christian Kirsch, MD, has assumed the challenging task of bridging the gap between the differing backgrounds and expectations. As an experienced seminar leader of the German Society for Medical Ultrasound (DEGUM – Deutsche Gesellschaft für Ultraschall in der Medizin), the Head Cardiologist at St. Josefs Hospital in Salzkotten is very familiar with this balancing act. For more than ten years, he has dedicated himself to continuing education on a regular basis. He is not at all fazed by the fact that a workload sufficient for two full days of work will be handled in only eight hours.

But this schedule is very much to the liking of the participants. It is not easy to find time in the tight schedule of medical practice, but it will be well invested here.

Answers to Practical and Clinical Questions

Kirsch begins with a focused presentation of the basics: standard views, transducer placement, patient positioning, and the best way to image cardiac anatomy and its vessels. "Exposure to the ultrasound beam initially occurs from the left parasternally, as far as possible cranially and close to the edge of the sternum, about in the third intercostal space," explains the ultrasound expert. Video sequences and special user tips introduce the first practice section of the day that will follow after about an hour. It is evident that the participants are highly motivated to put their newly acquired knowledge into practice right away.



Four examination stations and patient-test subjects ensure that course participants can put theory into practice right away.

Four examination stations are available for this purpose, where Kirsch and Siemens application specialists familiarize the participants with the essential applications for echocardiography. This fits precisely with the expectations of Annette Fischer-Ruvet, MD, an internal specialist in private practice in Bitburg, "I wanted to check whether I am using all the features on my equipment and learn how I can best measure the efficiency of the heart." A highly concentrated work atmosphere develops quickly around the four ultrasound systems, and the participants take full advantage of the opportunities to practice. The transducer is placed at changing angles on the heart side of the chest wall of the model on the examining table. Meanwhile, Kirsch is

careful to never take the transducer from the hand of a participant. If the participant is unable to find the proper position for an apical two-chamber view on his or her own, the trainer moves the participant's hand together with the transducer into the proper angle. This way, the participants do not have to take their eyes off of the image, while getting a direct feel for the proper handling. The results are displayed on screen immediately. All practical and clinical questions are answered.

A more compact expansion of the theoretical foundation follows in the lecture room. Doppler sonography is now the topic. The arrangement of the tables is reminiscent of lecture-format teaching. This, however, is merely an optical illusion. The presentation of content is supplemented with animations and video sequences. Kirsch continues to address the participants directly and poses short quiz questions. This way, the participants stay continuously active during the theory sessions as well.

Halfway through the course, the three participating physicians are already very satisfied with what they have learned. "The hands-on part is of course especially important and my questions in this area were answered immediately," Annette Fischer-Ruvet sums up what has taken place so far. Georg Schmidt-Brücken is also pleased with the up-to-date information: "I have already learned two tangible aspects that we will have to change as

of tomorrow." For Caroline Pitz, as well, the experience has been rewarding: "These truly are the basics."

Continuing Education Strengthens Competence and Competitiveness

The physicians' desire to participate in continuing education opportunities such as this Echo Basic Course is also naturally characterized by the necessity to update their medical knowledge continuously throughout their professional careers. At the same time, however, the demands on the quality of patient care are rising. In addition to lifelong learning (Continuing Medical Education, CME), the medical community also relies on maintenance and development of physician expertise (Continuing Professional Development, CPD).

In its own special way, Siemens meets the need to develop competitive advantages, which is important for medical facilities. Worldwide, continuing education and training opportunities for imaging techniques range from clinical workshops to training programs for technical service. The Course Selector on the Siemens website provides customer access to various opportunities in training and education in the form of a structured program of courses made available via this Internet portal. The goal is to offer customers one-stop shopping beyond national and European borders. Advanced continuing education in the area of ultrasound is



Optimizing the daily use of their ultrasound equipment is a core competency imparted at the Echo Basic Course.

Siemens Education – Knowledge is Key

At Siemens, education means that customers' knowledge remains at the highest level of quality healthcare – thanks to exceptionally well-trained employees. Siemens offers its services with easy access, proving that the search for education and training on the Internet does not have to be difficult. With the innovative search engine called Course Selector, found on the Siemens website, educational services can be selected by clinical specialties, product categories, instructional method, country, course language, and credits. Free text searching, for

example, looking for a certain course instructor, is also possible. On the results page, users are able to sort the course listing by categories such as language, date, and price. Each result contains an offering overview as well as detailed information. After selecting a course, users can register online. An example of proactive Siemens education is the Customer Excellence Center (CEC) established in 2007. The CEC offers its German customers a variety of ways to access information relating to the latest technologies.

already offered in the United States, with the corresponding orientation: efficient continuing-education opportunities with easy access. Customers schedule the clinical training themselves and decide when, where, and how they would like to enroll in continuing education. The keyword here is virtual education, and it comprises both self-guided e-learning, as well as instructor-directed electronic classes and courses.

Strong Concepts and Excellent Instructors

In the meantime, a huge market for medical continuing education has developed, and Kirsch emphasizes, "As far as the ultrasound area is concerned, there is a high demand for continuing education. You have to remember that ultrasound is the predominant examining method in many disciplines." Deike Strobel, MD, Head of the Ultrasound Department at the Medical Clinic I, Erlangen University Hospital, Germany, does not see an over-supply by any means, "because there is an increasing need for qualified ultrasound education of physicians for an optimal patient management in times of tense costs in public health." It is important that the concepts be continuously adapted to the needs of the physicians and to current educational developments. For this purpose, the courses are, among other things, evaluated using participant questionnaires. Opinions are also obtained from personal conversations during the events. The internal specialist from Erlangen is also a DEGUM seminar leader, which means that the involved trainers are also highly qualified presenters of ultrasound knowledge. She overlooks a period of almost 20 years in the area of continuing education. During this period, the training groups have become significantly smaller and a larger portion of the program has been devoted to practical exercises. "The combination of small-group training and theoretical aspects works very well," reports Strobel. At the same time, the content range has been expanded. In addition to the basic courses, there are programs for those who wish to acquire knowledge of specialized ultrasound techniques



A day of hard work filled with new insights and lots of experience lies behind the participants of the Echo Basic Course in Essen.

such as interventional sonography or contrast-enhanced sonography. Strobel and her colleague Kirsch share the opinion that Siemens is exceptional in its continuing education involvement. "The number and quality of Siemens training programs are really excellent," emphasizes the internal specialist and also refers to the extremely well-trained company personnel involved in the programs. The end of the echocardiography course is fast approaching and a short, final break is taken for refreshments. Resident physician Pitz is satisfied that she has now acquired the necessary basic information to determine the anatomical positions. With the concentrated knowledge gained today, she will be able to hone her skills even more in the future. Her wish for smaller practice groups ties in with that of her colleague in private practice, Fischer-Ruvet. She estimates that she can implement around one-third of what she's learned, and will pass the course manual to her new practice colleague the next day. Senior physician Schmidt-Brücken feels that there is no substitute for the concept with an emphasis on practice: "For someone like me, who has been at it for ten years and needs an update, the course is outstanding."

Summary

Challenge:

- Rapid expansion of medical knowledge, especially in the area of ultrasound
- New technologies require continuing education for the user to provide increased efficiency
- High demands on physicians: lifelong learning (CME/CPD)
- Little time for long training courses

Solution:

- Shortened course concepts in all medical areas
- Top-quality training personnel with respected reputations (DEGUM)
- Small courses with a major practical component
- Easy access to training program via online Course Selector

Result:

- Simple selection and booking of courses
- Qualified employees enhance the quality of the medical facility
- Gained knowledge as competitive advantage

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Further information

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