The ESC’s mission is to improve the quality of life of the European population by reducing the impact of cardiovascular disease. The European Association of Echocardiography (formerly Working Group on Echocardiography) of ESC (EAE) supports this mission and believes that by improving access to, and the quality of, cardiac ultrasound we can help the diagnosis and treatment of cardiovascular disease.

Why are we establishing an accreditation scheme in transthoracic echocardiography?

One of the main aims of the EAE is to promote excellence in clinical diagnosis, research, technical development and education in cardiovascular ultrasound in Europe, therefore raising the standards in echocardiography across Europe. In order to promote this, the EAE, after much consultation is developing an accreditation process for all practitioners of echocardiography. By establishing a standard and inviting cardiologists and sonographers to seek accreditation, we hope to encourage learning and training in echo labs throughout Europe. It is not our aim to rigidly standardize the practice of echocardiography, but to set a standard for knowledge and practical skill in the performance and reporting of echocardiograms to which people can aspire.

Why should someone seek accreditation?

Accreditation is voluntary and will not affect the statutory requirements for practitioners of echocardiography within the countries of the ESC. Accreditation is not restricted to current members of the EAE.

If you practice echo or you are learning to echo as a physician, sonographer or other health care professional, accreditation will set a target standard, guide learning and training and ultimately reward you with a credential that will be recognized internationally. This scheme will initially operate in parallel with local qualifications if available. The training process, by encouraging learning, use of textbooks, perhaps attendance at training courses and meetings, will benefit not just yourself but also your echo lab. Your patients, your colleagues and your employers will benefit from the confidence that accreditation brings and the training and learning that it requires.

The accreditation process

Accreditation consists of three parts: Learning to echo; passing a written assessment (exam); and submitting a log book of echo studies.

The most important part of the process is learning to echo!

We recommend learning within a recognized echo lab and seeking supervision, teaching and training. Please read textbooks to gain theoretical knowledge. Do attend local and where possible regional, national and international training courses and meetings. It is essential to practice echocardiography including interpretation and reporting of studies.
Application for accreditation is recommended only after core skills in echocardiography have been achieved. All applicants need a supervisor who may be a recognized echo expert such as a national working group member or local echo lab director.

To apply you need to complete the application forms available from the Heart House and on the EAE Web Site.

The exam will be held twice a year. The first exam was held at the EUROECHO meeting in Barcelona on December 6th, 2003. The exam consisted of multiple choice questions in English, but using standard echo terminology and with a glossary of terms in a number of European languages. All questions had a stem and 4 possible responses, one of which was best answer the question. The first half of the exam were questions testing theoretical knowledge of ultrasound physics and all aspects of transthoracic echocardiography. The second half consisted of MCQs based on echo studies shown as clips and stills from real patient examinations on screens in the exam room.

After passing the exam, the final stage is the submission of a log book of 250 transthoracic echo studies performed and reported over a 12 month period within a year of passing the exam.

On passing the log book the applicants name is passed to the EAE for the award of accreditation in transthoracic echocardiography.

Accreditation is valid for 5 years. Renewal of accreditation will require evidence of continuing practice and learning in the field of echocardiography.

Assessment

The exam is set by a committee of examiners from across Europe. An external examiner monitors the process and the questions are continuously validated. The exam is marked by computer for speed and accuracy.

The log books are graded by two independent examiners with regular audit by the examination committee.

Scheme organization

The EAE has established two committees to oversee the accreditation process. Under the auspices of the President and the elected officers of the EAE an accreditation committee runs the process. An accreditation assessment committee independently runs the exam and the grading of log books. The administration of the accreditation process is based at the European Heart House.

Training

The assessment of candidates goes hand in hand with offering and encouraging training. The EAE Education Committee will be running a training program in transthoracic echocardiography in parallel with the establishment of the accreditation process. The first one occurred this past October in Vienna and about 100 enthusiastic colleagues participated in it.

It is probably impossible to predict how non-invasive clinical diagnosis in cardiology will develop. Currently, we foresee continuing and exciting technological developments that will expand the potential for cardiovascular ultrasound further to diagnose subclinical or established disease with great precision and to offer new insights into pathophysiology. “High-end” echocardiographic machines become increasingly sophisticated and informative, demanding of us a considerable level of expertise. At the same time, new hand-held echocardiographic machines might even supplant the stethoscope; already some universities are teaching medical students how to perform basic echocardiographic diagnosis. The EAE exists to help us to meet these challenges and we sincerely hope to expand and create a truly European network to help us promoting our goals.
In Europe, the problem of training and accreditation in perioperative TEE has been addressed, during the last decade, by the European Association of Echocardiography (EAE), which is a formal association of the European Society of Cardiology (ESC), and the European Association of Cardiothoracic Anaesthesiologists (EACTA). The aortic root is usually easy to visualize with transesophageal echocardiography (TEE) and needs three cross-sections for a complete evaluation. The tricuspid valve consists of three leaflets, attached via multiple chordae tendineae to three small papillary muscles, a supporting annular ring, and a portion of the myocardium of the right ventricular (RV) free wall. An echocardiography, echocardiogram, cardiac echo or simply an echo, is an ultrasound of the heart. Echocardiography uses standard two-dimensional, three-dimensional, and Doppler ultrasound to create images of the heart. Echocardiography has become routinely used in the diagnosis, management, and follow-up of patients with any suspected or known heart diseases. It is one of the most widely used diagnostic tests in cardiology. It can provide a wealth of helpful information, including the size and shape. The process of accreditation or reaccreditation of a facility is one which insures high-quality throughout the entire imaging chain. The major accrediting bodies include The Joint Commission, the American College of Radiology, and the Inter-societal Accreditation Commission in the United States and the European Society of Cardiology in Europe. These organizations have developed a set of criteria necessary for a facility to be accredited. These include: the standards, staff training, clinical protocols, results communication, and quality improvement programs. The process is one of developing a