GUIDELINES: Why They Matter

Contributed by Rhonda Price, ASE Chief Standards Officer and International Relations Specialist

WHAT AND WHY

The ASE guidelines have become an essential and integral part of the practice of echocardiography. As echocardiographic technology and utilization continue to advance, an overwhelming amount of new information is being generated, requiring organized analysis, synthesis, and conversion into specific recommendations. The contents of a guideline are based on systematic evaluation of best available evidence as well as expert consensus.

ASE guidelines are designed to support decision-making in the use of echocardiography as an imaging modality. Ideally, the guidelines will reduce inappropriate variation in practice, provide a focus for continuing education, highlight limitations of existing literature, and provide direction for future research.¹

MEETING OF THE MINDS

Guideline documents start with a concept/perceived need, a leader, and a very carefully assembled group of experts who make up the writing group. Care is taken to assemble writing groups from a variety of practice settings because the ultimate aim for ASE's guidelines is to give direction for improved patient care. What happens next depends on the topic, but typically a robust, sometimes cacophonous, in-person discussion is the starting point for these documents. Compromise is often required by writing group members representing diverse professional experiences, as well as expert consensus when data is insufficient. "My experience is that our colleagues find tremendous value in an expert consensus," said Juan Carlos Plana, MD, FASE, lead author for the 2014 "Expert Consensus for Multimodality Imaging Evaluation of Adult Patients during and after Cancer Therapy." "These are often emerging topics, and the expert opinions provide immediate direction until sufficient data becomes available."

VETTING THE GUIDELINES

In addition to the group of experts that develop the content, another strength of ASE guideline documents is the very thorough review process. Members of the Guidelines Committee and Board of Directors, which are made up of members at large as well as representatives from all of the councils, give fresh eyes and different perspectives to the recommendations the writing groups have pondered for one or two (or more) years. It should be noted that unlike other documents published in the *Journal of the American Society of Echocardiography* (JASE), guideline documents are not reviewed by the JASE editorial board. Careful "peer review" is delegated to the Guidelines Committee and Board of Directors. A recently published guideline document had no fewer than 45 reviewers.

DISSEMINATION AND IMPLEMENTATION – PLEASE DO NOT STAMPEDE!

In recent years, the ASE Board of Directors has recognized the importance of taking guideline documents beyond words on paper. "It's no longer enough to just focus on writing guideline documents. We also have to make sure the guidelines are disseminated and implemented," said Neil J. Weissman, MD, FASE. Dr. Weissman planted the seed for the current implementation and dissemination ideas while he was the Guidelines Committee Chair a decade ago and had the opportunity to give these ideas a greater voice as ASE President 2014-2015. In addition, past president Roberto M. Lang, MD, FASE, led efforts to add attractive visuals to boost the visibility of the guidelines. As a result, guideline posters, apps, and webinars have evolved from the full text of the documents, making them available in convenient and user-friendly formats. More recently, patient summaries from the guideline documents are being tested, as patients become increasingly responsible for the management of their own healthcare.

ASE guidelines have educated the world and given uniformity to the practice of

echocardiography. The documents, posters, and webinars are now available in multiple languages, and have been at the forefront of ASE's global outreach.

In a blog post dating back to 2012 about a trip to China, James D. Thomas, MD, FASE, wrote about the global impact of ASE's guidelines: "[In Wuhan] we visited the Wuhan Asian Heart Hospital ... They now do 4,200 cardiovascular operations a year at their institution and over 13,000 caths and PCI's. While there I saw proof positive that ASE is having an impact in China. Right on the wall was [a translated] ASE Chamber Quantification poster! What was most remarkable was this was not in the echo lab but actually in the CT reading room, where they said they found it very useful for their measurements. I was told that they have the complete collection of posters in the echo lab [as had been the case at Fuwai Hospital in Beijing, as well]."

At the 2016 ASE Foundation training event in Xi'an and Yan'an, China, translations of ASE's 2015 Chamber Quantification and 2016 LV Diastolic Function posters were made available for distribution to all of the 500 Chinese physicians in attendance. The announcement that the popular posters would be distributed during the lunch break prompted these instructions from the local organizer: PLEASE DO NOT STAMPEDE!

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document has been cited nearly 12,000 times, making it the most cited document ever on the topic of echocardiography.

guide-line

A general principle or piece of advice. Synonyms: recommendation, instruction, direction, suggestion, advice

IMPACT FACTOR ON THE RISE

The exciting news that the JASE impact factor increased from 4.254 in 2015 to 6.852 in 2016, and that the Journal's ranking in the Cardiac & Cardiovascular Systems journal category jumped from 29th out of 124 journals in 2015 to 13th of 126 journals in 2016, can be attributed to a great Editor-in-Chief and his team.

Credit also goes to the guideline documents published in 2014 and 2015, which gave a significant boost through their citations. The 2015 "Recommendations for Chamber Quantification by Echocardiography in Adults" document (Lang et al) resulted in more than 500 citations in 2016. This is not surprising, since the 2005 Chamber Quantification

GUIDELINES PROMPT RESEARCH

"The opportunity to lead the 2005 ASE Chamber Quantification document changed my career," said Dr. Lang, lead author for the 2005 and 2015 Chamber Quantification documents. The 2015 Chamber Quantification document indicated a need for exploring whether chamber quantification values vary across countries, geographical regions, and cultures, resulting in the World Alliance Societies of Echocardiography (WASE) Normal Values study, an ASE Foundation-led research project with study centers in 16 countries. "We believe the information derived from this effort will be of benefit for echocardiography worldwide, not only in describing each population but also in comparing them to each other," said Dr. Lang.

COMING UP NEXT

In 2018 (or before), look for updates of the 2008 contrast document and the 2009 stress document, and other new documents on topics such as Chagas Disease, Performing a Comprehensive TEE Examination in the Pediatric Patient, Performing a Comprehensive TTE Examination, and Residual Valvular Regurgitation After Percutaneous Valve Repair or Replacement, as well as others.