

iVIEW

EDITOR'S PAGE



Veritas et Utilitas in Imaging



Y. Chandrashekhar, MD,^a Leslee J. Shaw, PhD,^b
Christopher M. Kramer, MD^c



As we start the new year, this issue of *JACC* highlights what we want to project over the coming years: a philosophy of “meliora,” both for imaging as a specialty and the journal as a medium for it. In the past year, we have tried to encourage papers that enhance our understanding and try to place imaging on a strong, evidence-based footing: “the pursuit of the better” in imaging. This issue contains a sampling of papers adhering to this vision. Some explore how imaging can be used to understand the secular trends in a particular disease over decades of follow-up (1), and some help us understand the variability and reproducibility of sophisticated testing (2,3). We have papers that clarify the role of important clinical advances, such as extracellular volume and T1 mapping for better detection of myocardial pathology such as myocardial fibrosis, compared with current gold standards such as histology. Even though clinicians do a lot of testing with imaging, it appears that frontline clinicians often don't make full use of test results for optimal downstream testing and therapy (4). Reports are useful only if they contain information in a logical,

easy-to-use manner and, more important, increase the chance that this information can be acted upon by frontline clinicians. Radiology has had success with such exercises in structured reporting, and cardiac computed tomographic angiography is catching up with the Coronary Artery Disease Reporting and Data System classification of coronary artery disease (5). However, we don't know if such extra effort is associated with benefit that justifies it, and a paper in this issue addresses this very topic by providing outcome data.

Finally, some imaging tests expose patients and operators to radiation risks. Hybrid (positron emission tomography/computed tomographic angiography) and sequential multiparametric testing (such as computed tomography plus computed tomographic perfusion) is generating excitement but might increase the amount of radiation. Meanwhile, techniques such as positron emission tomography/magnetic resonance might harness the advantages of tomographic, functional, and metabolic imaging, which is particularly useful in cardiac conditions such as inflammatory infiltrative diseases (e.g., sarcoidosis), while minimizing radiation dose. However, estimating effective radiation dose is still a problem, and a novel paper in this issue presents cardiac-specific conversion factors to assess effective radiation dose from conventional readouts such as dose-length product. Intravascular imaging is finding great interest in the interventional community, and

From ^aUniversity of Minnesota and VA Medical Center, Minneapolis, Minnesota; ^bEmory University School of Medicine, Atlanta, Georgia; and the ^cDepartments of Medicine and Radiology and the Cardiovascular Imaging Center, University of Virginia Health System, Charlottesville, Virginia. The authors have reported that they have no relationships relevant to the contents of this paper to disclose.

there is a rush to perform more and more of these procedures, even when there aren't robust randomized controlled trial data on the benefits, whether diagnostic or therapeutic. OPINION is one such randomized controlled trial that had a primary imaging focus and brings further clarity to the role of optical coherence tomography versus intravascular ultrasound. All of these papers show some of the directions in which the editors believe imaging should be moving if we are to present a credible defense for encouraging even more use.

What else is in the works for authors and readers in 2018? We expect to periodically roll out some new and exciting features throughout the year, starting with updated instructions to authors that will explain submission to these sections in more details. You will see faster turnaround times for papers. We have succeeded in bringing our average time from submission to first decision to 19 days and will work diligently to improve it further. We are aware that the low acceptance rate for *iJACC* (consistently in the 7% to 8% range over many years) means denying many meritorious papers that might have made the grade but for some critical reason did not cross the threshold. We are instituting a number of mechanisms to methodically increase the acceptance rate without compromising the quality we are known for. We have traditionally worked with authors to improve such papers on a selective basis, and you will now see more papers in this process.

Since its inception, *iJACC* has periodically created focused issues whenever we felt the need to highlight important developments. We have now made this tradition a regular feature, and these issues will often be in the form of separate, extra stand-alone issues in addition to the regular monthly issues. We piloted 1 such supplement featuring the critically important topic of imaging the right ventricle in the last quarter of 2017. You will be seeing more of these in 2018, starting with 1 focusing on another crucial topic: imaging inflammation in the cardiovascular system. This will also be 1 mechanism to improve our ability to showcase many more outstanding papers. Clinicians will see more novel clinical interactive features geared to improve their practice. Finally, we as an imaging journal need to find a platform for images

that teach, make one smile, and engage the mind but cannot be woven into a more comprehensive format for publication, including iPIX like reports. We will publish images that fall into this category through a feature we call iSHOTS: 1 or 2 images that are largely self-explanatory and have simple legends. These images will be reviewed internally by the associate editors, and the decision time will be only a few days.

Finally, it is important to reflect upon what we see as challenges. For one, we may have to urgently define the best quality metric for gauging and comparing medical journals. Despite nearly uniform protestations about the impact factor, it is still being used as one of the main imprimaturs of a high-quality journal. We will, in selecting papers for *iJACC*, continue to try to shift the focus away from the Impact Factor and strongly work toward bringing in papers we believe will have the greatest clinical impact.

We also worry that medical publishing is becoming more and more about "science by committee" in the form of creating and publishing multiple guidelines rather than publishing more original science that tackles difficult questions and furthers the evidence base for imaging. In the same vein, there seems to be a proliferation of review papers, often on a limited number of topics that are thought to attract citations. We strongly believe that this should not be the goal of a journal—the role, to us, is to provide a platform for influential emerging science—evidence-based even if controversial, on the edge of crucial change in practice, and one that can enhance the envelope of knowledge. That is what we will encourage through our selection of papers.

We look forward to an exciting year for your journal, *iJACC*, as we partner with you, our readers and authors, in this journey for learning the veritas et utilitas (truth and usefulness) of imaging in improving outcomes for our patients.

ADDRESS FOR CORRESPONDENCE: Dr. Y. Chandrashekhar, Division of Cardiology, University of Minnesota/VA Medical Center, Cardiology (111C), 1 Veterans Drive, Minneapolis, Minnesota 55417. E-mail: shekh003@umn.edu.

REFERENCES

1. Ramachandran VS, Xanthakis V, Lyass A, et al. Epidemiology of left ventricular systolic dysfunction and heart failure in the Framingham study: an echocardiographic study over 3 decades. *J Am Coll Cardiol Img* 2018;11:1-11.
2. Mirea O, Pagourelas ED, Duchenne J, et al., for the EACVI-ASE-Industry Standardization Task Force. Variability and reproducibility of segmental longitudinal strain measurements: a report from the EACVI-ASE Strain Standardization Task Force. *J Am Coll Cardiol Img* 2018;11:15-24.
3. Mirea O, Pagourelas ED, Duchenne J, et al., for the EACVI-ASE-Industry Standardization Task Force. Intervendor differences in the accuracy of detecting regional functional abnormalities: a report from the EACVI-ASE Strain Standardization Task Force. *J Am Coll Cardiol Img* 2018;11:25-34.
4. Hachamovitch R, Nutter B, Hlatky MA, et al. Patient management after noninvasive cardiac imaging results from SPARC (Study of Myocardial Perfusion and Coronary Anatomy Imaging Roles in Coronary Artery Disease). *J Am Coll Cardiol* 2012; 59:462-74.
5. Cury RC, Abbara S, Achenbach S, et al. Coronary Artery Disease - Reporting and Data System (CAD-RADS). *J Am Coll Cardiol Img* 2016;9:1099-113.