David E. Winchester

Department of Medicine and Radiology, University of Florida College of Medicine, Gainesville; Assistant Chief of Cardiology, Malcom Randall Veterans Affairs Medical Center, Gainesville, Florida; Senior Medical Adviser, Office of Integrated Veterans Care, Veterans Health Administration, Washington D.C; Secretary and Board of Governors Chair, American College of Cardiology (ACC), USA

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> **I am most excited about the wider adoption of photon-counting CT to improve our spatial resolution**

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Q1 Your expertise spans echocardiography, nuclear cardiology, and cardiac CT. In your opinion, what recent advances in these imaging modalities have had the biggest impact on diagnostic accuracy and patient care?

The technology that I use most frequently is coronary flow reserve combined with PET perfusion imaging and coronary artery calcium scoring. I am fortunate enough to have this technology at my primary site of practice, and I feel like it makes a substantial difference in being a comprehensive functional and anatomic assessment for coronary artery disease and ischaemia in my patients. In the world of cardiac CT, we have seen major advancements in flow reserve and plaque analysis. However, I think I am most excited about the wider adoption of photon-counting CT to improve our spatial resolution. Advances in echocardiography also hold promise for earlier detection of cardiac structural disease and a better understanding of the complex dynamics of myocardial contraction and relaxation that contribute to the syndrome of heart failure.

Q2 Your research has examined the application of risk scores for chest pain evaluation in the emergency department. What do recent findings from your work suggest about the effectiveness of these scores in identifying low-risk patients and reducing unnecessary testing?

Over the decades, numerous risk scores have been applied to populations presenting with chest pain in the emergency department. Many of these scores have failed to substantially improve accuracy compared to the comprehensive history and physical examination of a skilled clinician. The advent of high-sensitivity cardiac troponin (hs-cTn) assays, however, has provided a substantial advance, particularly in identifying low-risk patients within this population.

Q3 Based on your work with hs-cTnT, what insights have emerged regarding its safety and efficacy for rapid risk assessment and rule-out strategies in acute coronary syndrome?

Many cardiovascular professionals primarily see patients with elevated troponin levels. They often do not see the numerous patients with low or undetectable troponin levels who can be safely discharged from the emergency department after an abbreviated stay. The data show that these patients are very unlikely to suffer a major cardiac event within the next 30 days. These are the patients for whom hs-cTnT makes a difference, allowing clinicians to discharge them with a high degree of confidence.

Q4 Chest pain decision units have become an important strategy for safely triaging patients with a low-to-intermediate risk. Based on your research, what are the key elements that make these units most effective?

First and foremost is an institutional commitment to providing the resources for these

units. This includes adequate staffing and a multidisciplinary, collaborative approach among emergency medicine, hospital medicine, laboratory medicine, and cardiovascular medicine, where frontline clinicians are not only informed of the process for triaging patients with a low-to-intermediate risk, but are also invested in and see that process succeed. After that, the specifics of how the unit and its clinical protocols are run can be flexible and adapt to the needs of the patient population, clinical staff, institution, and community.

Q5 How do you see AI changing the evaluation of chest pain in the emergency department? Are there specific AI applications you find particularly promising based on current evidence?

I recently reviewed an unpublished manuscript on this very question, which demonstrated that a machine learning model could outperform established risk scores, such as the History, ECG, Risk factors, and Troponin (HEART) score. The investigators accomplished this by including >50 additional clinical variables, which would be impractical for a frontline clinician to memorise or manually input into a risk calculator. When these models can be easily implemented into clinical workflows and electronic medical record systems, they may hold promise for enhancing the accuracy of our clinical assessments.

Q6 As Lead Author of the American College of Cardiology (ACC)'s 2023 Appropriate Use Criteria for Imaging in Chronic Coronary Disease, what were some of the most significant updates you championed?

The most important change we made to the Appropriate Use Criteria for Imaging in Chronic Coronary Disease was the inclusion of a column to suggest deferred testing. This was very deliberately added to demonstrate to clinicians that there are clinical scenarios where it may be appropriate to perform a test, but it may also be appropriate not to perform any testing. I was glad to see how this was reflected by the rating panel. Our document was developed around the same time as the multisociety guidelines for the management of chest pain, and we were on the same page about eliminating the term 'atypical chest pain'. Overall, I was very satisfied with our efforts to simplify the document and to make it more applicable to daily clinical care.

Q7 As Chair of the ACC Board of Governors and Secretary of the Board of Trustees, how do you engage with chapter leaders across the USA, Canada, Mexico, and the USA health services to ensure cohesive advocacy and educational strategies that reflect the diverse needs of these regions?

Service in these roles has been incredibly rewarding, and it has been my privilege to routinely engage with cardiology leaders from across the USA and the world. We have regular meetings for both the entire Board of Governors and our steering committee, which are diverse and represent a broad array of leaders' backgrounds and experiences.

Q8 In October 2025, you'll take part in the 2025 ACC Legislative Conference, where cardiovascular professionals from across the USA will meet with policymakers. What are the most pressing issues you hope to highlight during this year's discussions?

One of the most important areas of advocacy for us has always been adequate access to care for our patients. This is under threat from a wide variety of challenges, including regulations that are not in the best interests of patients and practices, such as prior authorisation.