National report on optimal use of vascular laboratory tests for patients with known or suspected arterial disease

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(Medical Xpress) -- A new report issued today by the American College of Cardiology (ACC) and developed in collaboration with 10 other leading professional societies provides detailed criteria to help clinicians maximize the appropriate use of certain noninvasive vascular tests when caring for patients with suspected or known non-coronary arterial disorders. Emile R. Mohler, MD, professor of Medicine and director of Vascular Medicine at Penn Medicine, chaired the national committee producing the criteria.

"This is the first systematic and comprehensive evaluation looking at appropriate indications for vascular testing, such as ultrasound or functional testing," said Dr. Mohler, who is also a member of the Penn Medicine Cardiovascular Institute. "We hope this document will help clinicians determine whether or not and when to refer individual patients for testing."

Ultrasound and other noninvasive laboratory tests can be essential tools to help clinicians evaluate vascular blockages and disease, for example, in the arteries of the neck, kidneys, abdomen, and lower extremities, as well as the aorta itself. Such testing also plays a central role in surveillance of the vascular system in some patients to help inform treatment decisions and prevent serious problems, and is part of follow-up after peripheral vascular procedures, such as arterial bypass, surgical removal of plaque (endarterectomy), or stenting. Still, guidance about

when and how to best use this technology in practice is largely missing, according to experts.

Such decisions affect a growing number of patients as the population ages. Dr. Mohler estimates more than 20 million adults in the U.S. have some form of vascular disease, and would likely be a candidate for these types of tests.

The panel identified common clinical scenarios when noninvasive vascular testing might be considered in patients with suspected or known non-coronary arterial disorders (e.g., narrowing or blockages in the arteries of the neck, kidneys, abdomen or legs, abdominal aortic aneurysms, arterial dissection). Applying a rigorous rating scale, the 19-member panel then assessed the appropriateness of each indication and often at different time intervals (3-5, 6-8 and 9-12 months).

In addition to looking at the reasons for ordering these tests, the work group also sought to determine how frequently repeat testing is needed in clinical practice in light of the need for ongoing surveillance in some patients.

The appropriate use criteria were developed in collaboration with the ACC, American College of Radiology, American Institute of Ultrasound in Medicine, American Society of Echocardiography, American Society of Nephrology, Intersocietal Commission for the Accreditation of Vascular Laboratories, Society for Cardiovascular Angiography and Interventions, Society of Cardiovascular Computed Tomography, Society of Interventional Radiology, Society for Vascular Medicine and Society for Vascular Surgery. The document is further endorsed by the American Academy of Neurology, American Podiatric Medical Association, Society for Clinical Vascular Surgery, Society for Cardiovascular Magnetic Resonance, and Society for Vascular Ultrasound.

More information: www.cardiosource.org/