There is now strong definitive evidence from pathologic and vascular imaging studies that atherosclerosis begins in childhood and that this process, from its earliest phases, is related to the presence and intensity of known cardiovascular disease (CVD) risk factors.

The new National Heart, Lung, and Blood Institute (NHLBI)-sponsored Integrated Guidelines for Cardiovascular Health and Risk Reduction in Children and Adolescents reflect this dramatic increase in knowledge acquired in the past 20 years. There is evidence from long-term studies, including randomized controlled trials, that a healthy lifestyle in childhood results in an optimal CV risk profile in adult life. And there is a growing body of evidence demonstrating that reduction in identified risk factors in children results in a decrease in vascular abnormalities. The progressive deterioration in the CV risk profiles of children and adolescents related primarily to the obesity epidemic and its attendant risks for hypertension, dyslipidemia, and insulin resistance makes this information even more important.

Based on a formal review of the evidence, the new guidelines provide recommendations that address both the prevention of risk factor development — primordial prevention — and the prevention of future CVD by effective management of identified risk factors — primary prevention. Recommendations are specific to age and developmental stage and are integrated across risk factors. The guidelines also offer age-specific, evidence-based recommendations for individual risk factor detection. Management algorithms provide staged care recommendations for risk reduction within the pediatric care setting and identify risk factor levels requiring specialist referral.

The guidelines offer evidence-based support for pediatric care providers to use in optimizing CV health in infancy, early childhood, and adolescence — a time when many health behavior patterns develop, risk factors may become manifest, and risk reduction can have the greatest impact.

In this issue, members of the NHLBI Expert Panel who developed the guidelines provide focused information along with some practical approaches for implementing the recommendations in practice-based settings.

A comparison of the diet recommendations from the new CV-integrated guidelines with those from the Dietary Guidelines for America and from the American Heart Association was previously published in Pediatric Annals (Van Horn and colleagues, February 2012), along with an overview of activity guidelines for children and a review of the proposed timetable for implementation of the recommendations in the CV Guidelines during routine pediatric care.

In this issue, Reginald L. Washington, MD, outlines an approach to obesity based on integration of the Centers for Disease Control/American Medical Association (CDC/AMA) guidelines and the NHLBI guidelines (see page 283). Patrick E. McBride, MD, and Rae-Ellen W. Kavey, MD, MPH, describe the evidence for lipid screening in childhood and reviews the diagnosis and management of pediatric dyslipidemias (see page 284). And finally, Stephen R. Daniels, MD, PhD, Chair of the NHLBI Expert Panel for development of the integrated guidelines, describes the detection and management of hypertension (see page 285).

The concept of prevention is a major theme in all pediatric care. The new integrated guidelines provide evidence-based recommendations designed to prevent the development of risk factors and optimize CV health beginning in infancy. Pediatric care providers — pediatricians, family practitioners, nurses and nurse practitioners, physician assistants, and registered dietitians — are ideally positioned to reinforce these CV health behaviors. We hope that this issue devoted to CV health will be helpful in supporting implementation of the new integrated guidelines into routine care of children and adolescents.
About the Guest Editors

**Samuel Gidding, MD**, is Division Chief of Cardiology, Nemours Cardiac Center in Wilmington, DE; and Professor of Pediatrics, Jefferson Medical College in Philadelphia, PA. He received his medical degree from the College of Medicine and Dentistry of New Jersey, Rutgers Medical School; his pediatric training at State University of New York (SUNY)-Health Science Center at Syracuse; and his pediatric cardiology fellowship training at the University of Michigan at Ann Arbor. Dr. Gidding is a pioneer in the area of preventive cardiology in childhood and is involved in ongoing research in pediatric hypertension and insulin resistance, early imaging of atherosclerosis, and three multicenter studies: PDAY, TODAY, and CARDIA.

Dr. Gidding has also participated as an expert in the development of consensus guidelines and scientific statements for the National Institutes of Health (hypertension, comprehensive cardiovascular disease risk guidelines for children); Centers for Disease Control (tobacco); the American Heart Association (obesity, nutrition, tobacco, congenital heart disease); the National Lipid Association; American Academy of Pediatrics (nutrition, congenital heart disease); and the American Diabetic Association (lipids). He has authored or co-authored more than 140 peer-reviewed manuscripts and is a reviewer for numerous journals. Dr. Gidding is past Chair of the American Heart Association committee on Atherosclerosis in Youth.

**Rae-Ellen W. Kavey, MD, MPH**, is Director of Clinical Research for the Division of Pediatric Cardiology, and Professor of Pediatrics at the University of Rochester Medical Center. She received her medical education at McGill University and SUNY-Downstate Medical Center, her pediatric training at New York Hospital, Cornell University School of Medicine, and her pediatric cardiology fellowship training at Montreal Children’s Hospital and Babies Hospital – Columbia Presbyterian Medical Center. She is a past recipient of a Preventive Cardiology Academic Award from the National Institutes of Health. From 2005 to 2009, she served as the Coordinator for Pediatric Cardiovascular Risk Reduction at the National Heart, Lung, and Blood Institute, coordinating the work of the Expert Panel that developed the integrated guidelines. Dr. Kavey is past chair of the American Heart Association Council for Cardiovascular Disease in the Young and immediate past chair of the Board of Directors of Alpha Omega Alpha.