

Medical News & Perspectivesp855

Quality of Care Will Be a "Sweet Spot" for *JAMA Cardiology* Says New Editor-in-Chief

The JAMA Forum.....p857

Promoting Therapeutic Innovation: What Do We Do About Drug-Device Combinations?

JAMA Infographic.....p859

Mortality Rates for Children Younger Than 5 Years, 1990-2013

Lab Reportsp860

Hyperactive Innate Immunity at Birth Associated With Food Allergies

Enzyme Discovery May Lead to New Treatments for Metabolic Disorders

Scientists Identify Genes Critical to Development of Leukemia

Scientists Generate 3D Images of Cardiac Cell Connectors

News From the Food and Drug Administration.....p861

Making Devices Cyber Safe

Learning About French Trial Death

New Treatment for Liposarcoma

Medical News & Perspectives

Quality of Care Will Be a "Sweet Spot" for *JAMA Cardiology* Says New Editor-in-Chief

Julie A. Jacob, MA

When Robert O. Bonow, MD, professor of cardiology at Northwestern University's Feinberg School of Medicine, joined the National Heart, Lung, and Blood Institute in 1976 as a clinical associate shortly after completing his residency at the Hospital of the University of Pennsylvania, he assumed he would be there for only a few years. But the intrigue of cardiovascular research and encouragement from his mentors kept him at the institute for 16 years, where he served as a senior investigator and deputy chief of cardiology, delving deeply into the mechanisms of and therapies for hypertrophic cardiomyopathy and valvular disease.

Now director of the Feinberg Center for Cardiovascular Innovation, his years of research, teaching, and clinical practice have prepared him for his new role as editor in chief of *JAMA Cardiology*. The journal, which published its inaugural edition on February 24, addresses a broad spectrum of subjects in cardiovascular medicine (jamacardiology.com).

Bonow, who moved to the Feinberg School of Medicine in 1992 where he has served as chief of the cardiology division from 1992 to 2011, believes one of the most rewarding aspects of his work has been the opportunity to pay forward the support he received at National Institutes of Health by, in turn, mentoring young researchers.



Robert O. Bonow, MD

Bonow has also been active in the American Heart Association, serving as president from 2002 to 2003. He has published more than 500 articles and 100 book chapters, including editing the landmark *Braunwald's Heart Disease: A Textbook of Cardiovascular Medicine*.

In a recent interview, Bonow discussed his new editorial endeavor and what the future holds for the prevention and treatment of cardiovascular disease. The following is an edited version of the interview.

JAMA: What is your editorial vision for *JAMA Cardiology*?

DR BONOW: We have the opportunity to become one of the top scientific journals in cardiovascular disease. Our mission and our goal are to become one of the go-to journals for the best science [and] to attract papers from the best investigators across the spectrum of cardiovascular disease. We do have a couple of specific interests, but we want to be a journal that is sought after and read by the cardiovascular community, primarily a clinical community, that's involved in patient care and patient-based research. We want to cover areas of broad interest—heart failure, coronary artery disease, acute and chronic coronary interventions, valvular heart disease, adult congenital heart disease, and imaging of the heart.

We have a heavy interest in cardiovascular epidemiology and in the quality of and delivery of care. [We also have an interest in] health services research and maybe, as the field evolves, the genetics of cardiovascular disease and how that plays out into personalized care, where I think we have a long way to go.

JAMA: What topics would you especially like to see addressed in manuscripts submitted to *JAMA Cardiology*?

DR BONOW: We want to see topics across the board in cardiovascular disease because

the field keeps moving in progressive ways and sometimes in ways that were not understood or even thought of previously.

In addition to original science, we would like to publish hot topical opinion pieces and Viewpoints. We've already solicited such Viewpoints from prominent individuals and good review articles of timely topics to bring clinical investigators up to speed, perhaps in the areas where they already have great interest or where they know they're lacking knowledge and want to get up to speed.

JAMA: What are three of the most pressing issues in cardiology today in terms of cardiovascular disease prevention and treatment?

DR BONOW: We still have an epidemic of heart disease, and it's still the leading cause of death if we look at all forms of cardiovascular disease, including stroke, heart attacks, and heart failure. Much of that is preventable. We need to be educating providers, as well as the population, about cardiovascular risks and prevention.

Cardiovascular medicine in particular has had great success in large-scale, randomized clinical trials, large registries that we can [reference] to look at the real-world experience of patients with various diseases.

If we just took the things that we already know work, put them in the hands of the people who can give them to the patients who need them, we could have a huge impact on reducing the burden of cardiovascular disease. We hope that our journal will address that by talking about implementation and health services, how we can pull data from our various clinical trials and guidelines, but also from large registries.

In addition, I think there are huge issues now regarding some new therapies that are somewhat expensive, whether they are new drugs or new devices. How do we begin to identify which patients really need them? How can we come up with cost-effective strategies? What's the medical economics of some of these more expensive medications? How do we begin to define end-of-life issues when we have a new device that we can apply to a patient to prolong life? These are difficult issues.

JAMA: Do you have an example of a drug or a therapy that's very expensive?

DR BONOW: Well we have these new PCSK9 inhibitors, which dramatically lower

cholesterol in patients in whom one is not achieving effective therapies with oral drugs like statins. They're quite expensive. Another example would be transcatheter aortic valve replacement, which has been a transformative technology, in many cases providing opportunities to treat patients who previously had no treatment. Where do we begin to identify when the expenses become a real consideration? We do need to begin to look at the economics of cardiovascular care and how we can provide what's cost effective, and also how we can move the bar toward individuals in lower socioeconomic strata to make these expensive treatments that are very effective available to all people.

JAMA: What are the 3 biggest advances that have been made in the prevention and treatment of cardiovascular diseases? What's on the horizon for the next 10 years or so?

DR BONOW: One of our advances has been the ability to organize the cardiovascular investigator pool to put together clinical trials that have been very meaningful, and from that we can derive the evidence that creates guidelines. From the guidelines, we can begin to develop measures of performance to see whether physicians and hospitals are adhering to guidelines and recommendations.

We've had important advances in medical therapies—statins probably stand out as being one of the most transformative medical therapies in the last several decades. Our hypertensive therapies are also very important.

There is the ability to open arteries and treat myocardial infarctions in ways that were unimaginable when I was in training. We had patients come in with heart attacks and our treatment pretty much was to put them on bed rest, give them morphine and oxygen, and wait. The outcome was suboptimal. Advances in imaging that have moved from echocardiography into nuclear cardiology now to the advanced imaging computed tomography, diagnostic resonance imaging, have enabled clinicians to make timelier and earlier diagnosis of disease.

We're also going to see major advances in genomics. Genetics allows us to begin to provide more personalized medical therapies as well. Sooner or later, we're also going to have some major breakthroughs in

cardiac regeneration, so that we will in the future have therapies to grow new blood vessels and regenerate damaged heart muscle, or perhaps to develop devices that can be implanted, such as a biological valve that's been created out of the patient's own tissue.

JAMA: In your recent JAMA editorial, you noted the rising rates of obesity and diabetes around the world. What are some of the consequences of this trend?

DR BONOW: Many of us are concerned about the impact of obesity, metabolic syndrome, and diabetes on cardiovascular health that could blunt the [medical] advances we've seen over the last half-century.

Diabetes is like putting your foot on the accelerator of atherosclerosis and heart failure, and people with diabetes have much worse outcomes, as well as a much more regressive form of disease. As the rates of diabetes increase, we're likely to see more complicated patients who have worse outcomes. Therefore, trends that we've been witnessing in the reduction of cardiovascular death rates may start to plateau or maybe even begin to increase.

Segments of the population who may be most affected include Hispanic Americans as well as African Americans. We need important strategies in terms of prevention to reduce the rates of diabetes and obesity. This means more than just a new device or a new medication, but some new strategies in terms of nutrition and exercise and community messages to the segments of the population who need to hear these messages.

JAMA: What innovations are occurring in the delivery of care to cardiac patients?

DR BONOW: There has been very strong leadership in the cardiovascular realm to drive improvement in patient care. The registries we have serve as quality improvement tools by providing feedback and interesting data.

In addition, new devices have also been innovative in improving care, and in some cases providing treatment options in patients who previously had no options. The defibrillator, when applied to the right patients, will save lives. Pacemakers also provide a better quality of care, allowing us to give medications to patients who otherwise couldn't receive medications because of heart rate effects. ■