The American Heart Association and the Million Hearts Initiative

A Presidential Advisory From the American Heart Association

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Building healthier lives, free of cardiovascular diseases and stroke" is the mission that unites the volunteers and staff of the American Heart Association (AHA). When the AHA established its 2020 Health Impact Goal, "to improve the cardiovascular health of all Americans by 20% while reducing deaths from cardiovascular diseases and stroke by 20%,"[1] it recognized that to reach this goal the AHA would need to focus even more of its time, attention, and resources on improving cardiovascular health through a diverse range of prevention strategies.

Passage of the 2010 Patient Protection and Affordable Care Act (ACA)[2] has provided the health community with multiple opportunities to elevate the importance of clinical- and population-based prevention and thereby to reduce the morbidity and mortality of cardiovascular disease (CVD) and stroke while addressing in a more fundamental way these enormous drivers of healthcare costs. Although the resulting legislation remains politically divisive, a number of key provisions in the ACA have the potential to transform the current healthcare delivery system and its preponderance for "sick care" to one that better incorporates, coordinates, values, and financially rewards quality and prevention. Many of these provisions are found in Title IV: Prevention of Chronic Disease and Improving Public Health, leading Assistant Secretary for Health Howard Koh and Secretary of US Department of Health and Human Services (HHS) Kathleen Sebelius to observe that moving prevention toward the mainstream of health may well be one of the most lasting legacies of this landmark legislation.[2] The question is whether we can seize this moment to fully leverage these provisions to affect CVD.

One reason to be optimistic about the potential for a transformation to a focus on prevention is the HHS ' recently announced Million Hearts Initiative (Million Hearts). This new initiative will focus, coordinate, and enhance CVD prevention in the programs, activities, and implementation of the ACA across all HHS agencies with the aggressive goal of preventing 1 million heart attacks and strokes over the next 5 years (by 2016). By pledging to partner with and work alongside healthcare providers, nonprofit organizations, and the private sector, Million Hearts represents an unprecedented commitment on the part of Secretary Sebelius and the HHS to make preventing heart attacks and stroke a top national health priority. The AHA not only applauds the launch of Million Hearts but also is grateful for the opportunities we have been provided to help inform, shape, and support the initiative. We look forward to joining and partnering with Secretary Sebelius and the HHS in implementing this initiative, which has the potential to advance the mission and work of the AHA dramatically and to help us achieve our ambitious 2020 Health Impact Goal.

CVD: A Growing Burden

The burden of CVD in terms of life-years lost, diminished quality of life, racial and ethnic disparities, and direct and indirect healthcare costs is staggering. CVD is the leading cause of death in the United States and is responsible for 17% of national health expenditures.[3] In the past decade, the medical costs of CVD (including stroke) have grown at an average annual rate of 6% and account for ≈15% of the increase in US healthcare spending.[4]

CVD and stroke prevalence and associated costs are projected to increase substantially in the future. The AHA

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projects that by 2030, 40.5% of the US population will have some form of CVD, costing the healthcare system an estimated $1 trillion every year.[3] Even more disconcerting is that if certain CVD risk factors—diabetes mellitus and obesity—continue to increase rapidly, the United States may face an even greater increase in CVD prevalence and associated costs.[5]

Although these projections are alarming, they need not become reality. CVD and stroke are largely preventable for a significant part of the lifespan. High blood pressure, high cholesterol, and smoking continue to put people at risk of heart attack and stroke. To address these risk factors, the Centers for Disease Control and Prevention is focusing many of its efforts on the "ABCS" of heart disease and stroke prevention: appropriate **A**spirin therapy, **B**lood pressure control, **C**holesterol control, and support for **S**moking cessation for those trying to quit and, even more generally, comprehensive tobacco prevention and control efforts.

It is estimated that if all Americans had access to recommended CVD prevention activities, myocardial infarctions and strokes would be reduced by 63% and 31%, respectively, in the next 30 years.[6] However, access to preventive services remains low. There are tremendous gaps in clinical prevention: only 47% of patients at increased risk of CVD are prescribed aspirin; only 46% of individuals with hypertension have adequately controlled blood pressure; only 33% of people with high cholesterol have adequately controlled low-density lipoprotein cholesterol; and just 26% of those who want to quit smoking receive adequate support services.[5] In addition, effective community prevention interventions, such as eliminating exposure to secondhand smoke and decreasing sodium and *trans* fat intake in the population, have been underused because of a lack of a coordinated national effort to make these population interventions available to reduce CVD.

Potential Impact of the ACA

While acknowledging that no legislation is perfect, the AHA supported passage of the ACA ("health reform") with the belief that the law established a framework for addressing many of the principles set forth in "The American Heart Association's 2008 Statement of Principles for Healthcare Reform."[7] The expansion of health insurance coverage for millions of Americans alone makes it significantly more likely that the millions of Americans who would otherwise have been uninsured will have access to the preventive services, primary care, prescription drugs, emergency care, and other care that individuals need to maintain and improve their health. Moreover, the clinical and community prevention programs established under the ACA bring new attention to prevention for chronic disease and have the potential to energize and strengthen prevention efforts for CVD. To realize the potential of the ACA for patients with CVD, a robust coordinated prevention implementation effort across the HHS is needed to bring improvements to clinical preventive care and effective community prevention interventions. Million Hearts is expressly designed to help meet this need.

Million Hearts

Million Hearts will make preventing heart attacks and stroke a top priority for the HHS, its component agencies, and the broader healthcare system. Million Hearts will target improvements in both clinical preventive practice (eg, reducing uncontrolled blood pressure and cholesterol, increasing aspirin use to prevent and reduce the severity of heart attacks and strokes) and community prevention (eg, eliminating smoking and exposure to secondhand smoke, decreasing sodium and *trans* fat intake in the population). The initiative will build on key provisions in ACA and other policy initiatives to bring a measurable increase in CVD prevention. Examples of policies that will be coordinated with the Million Hearts Initiative include the following:

- **Community Transformation Grants:** Through the Community Transformation Grants program, the Centers for Disease Control and Prevention will award grants to state-, local-, and community-based entities to implement a wide range of evidence-based community preventive health activities to reduce chronic disease, including CVD.[2] The Community Transformation Grants program strategies will include the ABCS through clinical preventive services, tobacco-free living campaigns, and initiatives such as increasing access to low-sodium options in local grocery stores and restaurants. Within the Community Transformation Grants program, there may be an important potential role for the Guideline Advantage program, developed by the American Cancer Society, the American Diabetes Association, and the AHA, which supports consistent use of evidence-based guidelines for the prevention and management of disease through existing healthcare technology.
- **Physician Quality Reporting System:** The Physician Quality Reporting System is a reporting program that offers incentive payments to eligible Medicare providers who satisfactorily report quality data on Medicare patients. Beginning in 2015, the law will institute a penalty for failure to report data to Physician Quality Reporting System.[2] In 2012, revised reporting measures under the Physician Quality Reporting System will include enhanced measures of the ABCS, which are the key clinical interventions to prevent heart attack and stroke.
- **Medicare Shared Savings Program:** The ACA establishes the Medicare Shared Savings Program, which will encourage groups of providers and suppliers to work together through accountable care organizations.[2] Under the proposed rule issued in April 2011, an accountable care organization's performance on quality measures will determine its share of any savings achieved under the program. The HHS has included ABCS quality measures within this framework.
- **Centers for Medicare & Medicaid Services 10th Statement of Work for Quality Improvement Organizations:** The Centers for Medicare & Medicaid Services Statement of Work describes the criteria that the

Table. Contribution of Million Hearts to the AHA's 2020 Impact Goal[8]

Million Hearts Goal	AHA Impact Goal	Result
Prevention of 1 million heart attacks (MIs) and strokes in 5 y	20% reduction in deaths from cardiovascular disease and stroke by 2020	Million Hearts could contribute more than half of the achievement toward the AHA 2020 Impact Goal
Events	**Calculations**	**Million Hearts Time Frame**
New and recurrent MI and recurrent strokes	Million Hearts: 935 000 AHA 2020 Impact Goal: 795 000	Total: 1 730 000×5 y=8 650 000
Mortality from MI and stroke	Million Hearts: 133 000 AHA 2020 Impact Goal: 136 000	Total: 269 000×5 y=1 345 000
Total CVD mortality	813 800	813 800×5 y=4 069 000
Ratio of deaths to events in 5 y (assuming constant values)	1 345 000 (Million Hearts):8 650 000 (AHA 2020 Impact Goal)=0.155	There are ≈15% as many deaths as events
Ratio of deaths from MI and stroke to total CVD deaths	1 345 000 (Million Hearts):4 069 000 (AHA 2020 Impact Goal)=0.33	MI and stroke deaths make up 33% of total CVD deaths
Prevention of 1 million heart attacks and strokes		Should prevent 155 000 deaths
Ratio of MI and stroke deaths prevented in 5 y to expected MI and stroke deaths	155 000 (Million Hearts):1 345 000 (AHA 2020 Impact Goal)=0.115	11.5% of expected MI and stroke deaths in 5 y would be prevented by the prevention of 1 million heart attacks and strokes

AHA indicates American Heart Association; MI, myocardial infarction; CVD, cardiovascular disease.

Data from Roger et al,[8] Table 23-1, page e203. All relevant values are from 2007. Except for new and recurrent MI, which is limited to ≥35 years of age (there are very few at younger ages), each value applies to all ages.

Centers for Medicare & Medicaid Services will use to evaluate effectiveness, efficiency, and quality through quality improvement organizations. The 10th Statement of Work, which affects quality improvement organizations that enter into contracts with Centers for Medicare & Medicaid Services on August 1, 2011, already includes promotion of the ABCS to improve cardiovascular health, just 1 component of Million Hearts that is already in place.

- **Coverage of Clinical Preventive Services:** The ACA requires Medicare and, over time, most private health plans to cover evidence-based clinical preventive services without any cost sharing. Among the services receiving an A or B rating from the US Preventive Services Task Force that are now required to be covered at no additional cost to the enrollee are screenings for high blood pressure and high cholesterol, obesity counseling, and tobacco cessation services.
- **Essential Health Benefit Package:** The HHS must develop an "essential health benefit" package that all qualified health plans participating in the new state-based health insurance exchanges must offer to qualified individuals.[2] The law requires that "preventive and wellness services and chronic disease management" be covered as part of the package, and the HHS has an opportunity in defining the essential benefit package to influence the preventive benefits offered to individuals enrolled in the state exchanges and to promote ABCS quality improvement.

The potential impact of clinical and community prevention efforts led by Million Hearts will depend on continued and effective coordination across a diverse range of activities and partners, many of which are outlined above.

Measuring 1 Million Hearts Saved

The Million Hearts Initiative is aligned with *Healthy People 2020* heart disease and stroke targets, which have been set on the basis of achieving a 10% to 20% improvement in cardiovascular prevention over a 10-year period. By using the diverse platform of health reform to launch a rigorous effort to achieve successful clinical and community preventive interventions, the campaign is expected to produce a 10% reduction in the rate of acute cardiovascular events each year. There are ≈2 million heart attacks and strokes in the United States annually.[8] A 10% reduction would equate to 200 000 prevented cardiovascular events per year. If this rate is achieved and sustained over the 5-year campaign, Million Hearts will reach the goal of preventing 1 million heart attacks and strokes.

Million Hearts has the potential to make a significant contribution to the AHA's 2020 Impact Goal to prevent 20% of CVD and stroke deaths by 2020 by preventing 10% of deaths resulting from myocardial infarction and stroke (which account for one third of all CVD deaths) over 5 years (Table). It would be expected that preventing 1 million heart attacks and strokes would reduce CVD deaths even further by also reducing deaths from other CVD causes.

Several recently published studies indicate that the goal of reaching 1 million prevented cardiovascular events is plausible and achievable through clinical and community preventive interventions. For example, 1 study that examined clinical preventive interventions estimates that improved blood pressure control could prevent almost 9 million heart attacks and strokes over a 30-year period and that improved cholesterol control could prevent ≈9.5 million events.[6] Another study of community interventions

estimates that a 3-g/d reduction in salt intake in the general population would result in the prevention of between 54 000 and 99 000 heart attacks and 32 000 and 66 000 strokes per year.[9]

To reach the AHA's 2020 Impact Goal for cardiovascular health (to improve the cardiovascular health of all Americans by 20% while reducing deaths from CVD and stroke by 20% by 2020), ≈4 million cardiovascular events must be prevented in 10 years. The AHA's 2020 Impact Goal may be more aggressive than the Million Hearts goal, but the data show that with concerted public/private and cross-organizational effort to achieve a range of clinical and community preventive interventions, these goals are achievable.

AHA: A Partnership With Million Hearts

Million Hearts represents an unprecedented opportunity to bring CVD prevention to the forefront of federal healthcare policy. As the leading voluntary health organization in the field of CVD, the AHA is committed to this initiative and welcomes an opportunity to take a leadership role in its implementation. In addition to working to help inform and shape ACA implementation to support Million Hearts, the AHA is prepared to partner with the Centers for Disease Control and Prevention and other HHS agencies on various initiative activities, including the Community Transformation Grants. The AHA is also committed to working with HHS to hold ourselves collectively accountable for achieving the goals of Million Hearts, including evaluating and publically reporting progress toward reducing 1 million heart attacks and strokes over the next 5 years. The Guideline Advantage program may contribute to these surveillance efforts.

In addition to improving CVD prevention in the next 5 years, Million Hearts aims to use the prevention of CVD as a model for how health reform can work to make a dramatic, immediate, and sustainable impact on the healthcare system to save lives and to prevent chronic disease. The lessons learned from Million Hearts will inform complementary implementation efforts addressing other chronic conditions. The AHA applauds the HHS for embarking on the Million Hearts endeavor, and we believe that with steady commitment from the HHS and AHA, the goals of the initiative are achievable.

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