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Abstract: Million Hearts is a national initiative to improve the nation's cardiovascular health through evidence-based practices and prevention. This article reviews the ABCS of Million Hearts with an emphasis on NP-led care models. Recommendations for clinical practice, education, research, and health policy are highlighted.

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Launched in 2011, Million Hearts is a 5-year initiative with the goal to prevent 1 million heart attacks and strokes by 2017. The initiative is co-led by the CDC and the Centers for Medicare and Medicaid Services within the Department of Health and Human Services. The initiative encourages the formation of public–private partnerships at the federal, national, state, and local levels in order to achieve this goal. Million Hearts emphasizes the clinical prevention of heart attacks and strokes, improving access to better cardiovascular care, enhancing appropriate medication adherence, and increasing community prevention efforts. The clinical aspects of Million Hearts include improving the management and deployment of the ABCS, where A is for **a**ppropriate aspirin use, B is for **b**lood pressure control, C is for **c**holesterol management, and S is for **s**moking cessation.[1] Use of health information technology and standardization of core ABCS metrics allow for better tracking of the initiative's goals across all types of health systems. It has already been added to quality measures used in the Medicare and Medicaid Electronic Health Record Incentive

Keywords: cardiovascular disease, evidence-based practice, Million Hearts, nurse-led interventions

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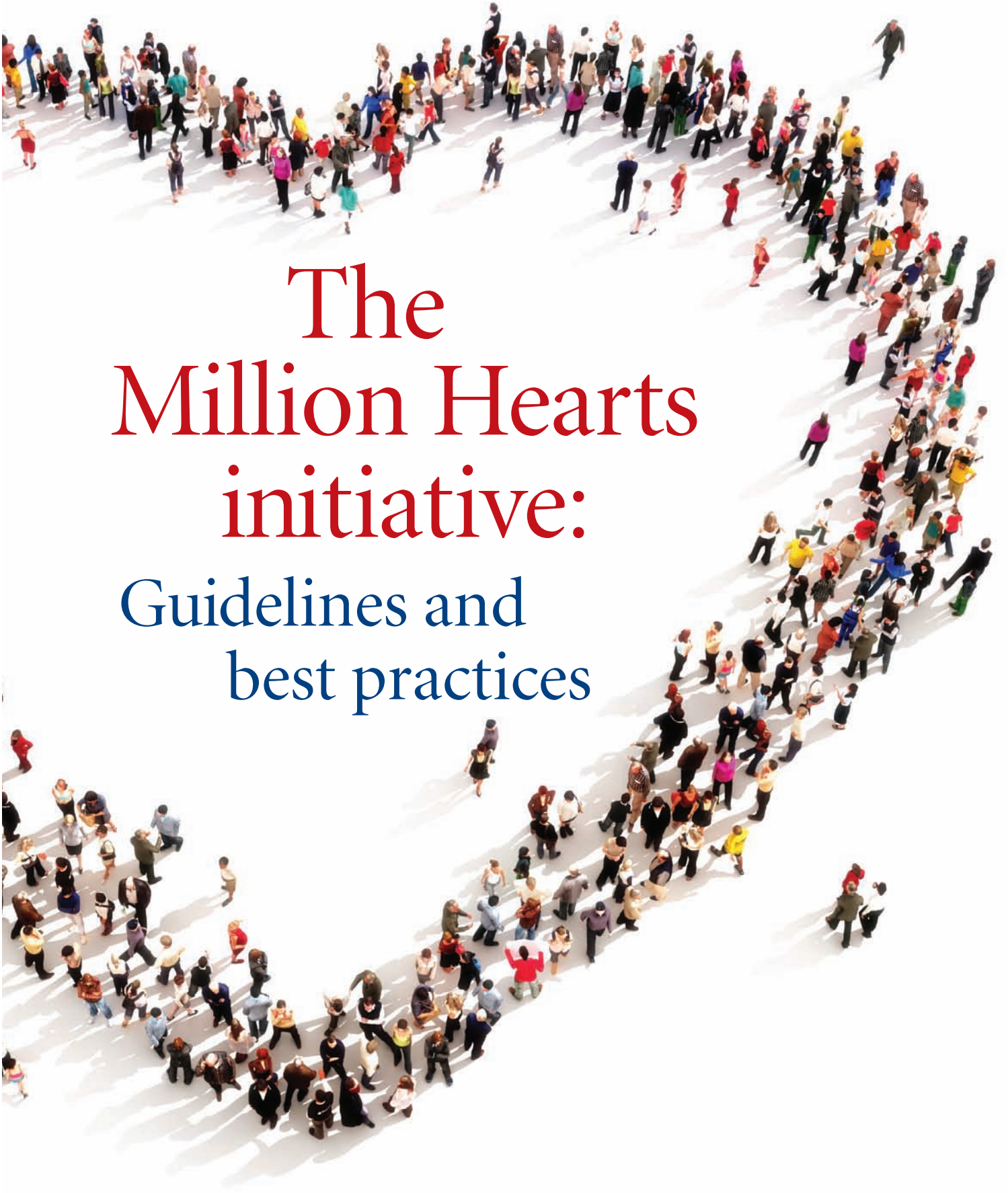

The Million Hearts initiative:

Guidelines and best practices

Programs ("Meaningful Use"), the Physician Quality Reporting System, and the Accountable Care Organization metrics.[2]

Community-based prevention strategies focus on empowering people to make healthy choices for a heart-healthy lifestyle, lead efforts to promote smoke-free environments, eliminate artificial trans-fats, and reduce sodium in the food supply. This initiative aligns with the National Quality Strategy and will help to meet the targets of Healthy People 2020 (available at www.millionhearts.hhs.gov). With a workforce of 2.8 million, nurses, specifically NPs, are well suited to lead the nation in promoting cardiovascular health through the Million Hearts platform.[3]

Nursing's role in Million Hearts

Nurses comprise the largest healthcare workforce and are the public's most trusted resource.[4,5] They assume key roles in both the prevention and management of chronic and acute diseases across the life span. Nurses, especially NPs, focus on health promotion, wellness, and disease prevention, which are necessary for preventing and mitigating adverse outcomes associated with cardiovascular disease (CVD).

NPs manage chronic diseases such as hypertension and CVD, and in the majority of states, freely prescribe medications to treat and improve these conditions. It has been established that NPs have equivalent patient outcomes to those of physicians, and nurse-led interventions are successful in promoting behavior change.[6-10] Integrating nursing into the action plan for Million Hearts, including clinical, community, education, research, and public policy initiatives, is vital.

The ABCS of Million Hearts

Achieving excellence in the ABCS of Million Hearts can prevent more events than other clinical preventive services. Through the education and modification of cardiovascular risk behaviors, 90% of the population-wide risk could be reduced, and more than 100,000 lives could be saved annually.[11] These four evidence-based deliverables provide a solid foundation on which NPs can focus treatment and target prevention.

Appropriate aspirin therapy. The U.S. Preventive Services Task Force (USPSTF) recommends the use of aspirin for men ages 45 to 79 when the potential benefit of a reduction in myocardial infarction (MI) outweighs the potential harm of an increase in gastrointestinal hemorrhage and for women ages 55 to 79 when the potential benefit of a reduction in ischemic stroke outweighs the potential harm of an increase in gastrointestinal hemorrhage.[12] The evidence is insufficient to make a recommendation on aspirin use to prevent CVD in those age 80 or older. These recommendations are currently under review by the USPSTF.

The Million Hearts initiative emphasizes *appropriate* aspirin use, as aspirin can increase the risk of bleeding and is contraindicated in some individuals. Although the USPSTF does not recommend specific aspirin dosages, most providers generally use 81 mg daily for secondary prevention of CVD and stroke in those at higher risk for coronary heart disease unless the patient is intolerant to aspirin or at higher risk for a hemorrhagic stroke.[13,14] A recently published meta-analysis that included Cochrane Reviews substantiated a significant net benefit of low-dose aspirin for the secondary prevention of CVD. However, the decision to start a patient on aspirin must balance the CVD level of risk against comorbidities, which contraindicate daily aspirin use.[15]

BP control. Over 78 million adults in the United States have hypertension, yet 47% do not have it controlled to recommended levels.[16] Hypertension is the most common condition seen in primary care and one of the most preventable causes of disease and death in the United States.[17] The USPSTF recommends screening for high BP in adults age 18 and older and is a grade "A" recommendation.[18] Grade A recommendation means there is high certainty due to much evidence that the net benefit of the screening or preventive treatment is substantial; therefore, USPSTF suggestion for practice is to provide the service.

Two sets of BP guidelines were recently released. The American Heart Association (AHA), American College of Cardiology (ACC), and the CDC issued a science advisory titled *An Effective Approach to High Blood Pressure Control* in late 2013, and the Eighth Joint National Committee released their *Evidence-Based Guideline for the Management of High Blood Pressure in Adults* in early 2014.[17,19] Both guidelines place a strong emphasis on lifestyle modifications (see *Summary of high BP guidelines*).

Cholesterol control. Elevated blood cholesterol is a modifiable risk factor for CVD. Approximately one-third of the population has an elevated low-density lipoprotein (LDL).[20] The USPSTF recommends routine screening beginning at age 35 and 45 for men and women, respectively. Earlier screening is recommended in those with multiple CVD risk factors.[21]

The updated clinical practice recommendations by the ACC and AHA for the treatment of blood cholesterol levels to lower atherosclerotic cardiovascular disease (ASCVD) risk in adults (age 21 or older) are based on randomized controlled trial (RCT) data, systematic reviews, and meta-analyses.[22] Interestingly, the ACC/AHA Expert Panel did not find RCT evidence to support titrating cholesterol-lowering therapy to a specific LDL cholesterol target as recommended by the Adult Treatment Panel III. However, the ACC/AHA Expert Panel did identify evidence that the appropriate intensity of

Summary of high BP guidelines[17,19]

	Target BP	Initial treatment suggestions	Special considerations
AHA/ACC/CDC ***An Effective Approach to High Blood Pressure Control***	Target BP for all individuals of less than 140/90 mm Hg.	Stage 1 hypertension (systolic 140–159 or diastolic 90–99 mm Hg) lifestyle modifications and consider a thiazide diuretic. Stage 2 hypertension (systolic ≥160 or diastolic ≥100 mm Hg) lifestyle modifications and a 2-drug combination: Thiazide diuretic and an ACEI, ARB, or CCB or ACEI and CCB.	Consider lower BP targets for individuals with chronic diseases such as diabetes mellitus, chronic kidney disease, and left ventricular hypertrophy and in populations such as Black patients and older adults.
Eighth Joint National Committee ***2014 Evidence-Based Guideline for the Management of High Blood Pressure in Adults***	Individuals age 60 or older have a target goal of less than 150/90 mm Hg. Individuals under age 60 and those age 18 and older, with diabetes or CKD, have a target goal of less than 140/90 mm Hg.	Initial treatment of non-Black patients including those with diabetes should be thiazide diuretic, CCB, ACEI, or ARB.	Initial treatment of Black patients with hypertension, including those with diabetes, should be either a CCB or a thiazide diuretic. Initial treatment of patients age 18 and older with CKD should include an ACEI or ARB.

Key: ACEI = angiotensin- converting enzyme inhibitor, ARB = angiotensin II receptor blocker, CCB = calcium channel blocker, CKD = chronic kidney disease.

HMG-CoA reductase inhibitor (statin) therapy should be used to reduce ASCVD risk.[22] Statins are the only treatment recommended by the guidelines for hypercholesterolemia, as they have demonstrated a consistent ability to lower an individual's risk for ASCVD events, whereas other pharmacologic agents have not.[22]

The guideline lists an algorithm for selecting either a moderate- or high-intensity statin for each statin benefit group. It emphasizes that lifestyle modification (heart-healthy diet, regular exercise habits, avoidance of tobacco products, and maintenance of a healthy weight) is an important component of health promotion and ASCVD risk reduction and should be implemented along with cholesterol-lowering therapy. Four major statin benefit groups were identified for which the benefit of treatment clearly outweighed the risk of adverse events (see *Four groups for statin therapy*).

Smoking cessation. Tobacco use is increasing in youth and in young adults in the United States. Every day, 1,200 individuals die from smoking and, for every 1 of these deaths, at least 2 youth who are under the age of 18 or young adults take their place in the tobacco world.[23] With the popularity of e-cigarettes and other alternative tobacco products, these numbers could rise.[24] Smoking and exposure to second hand smoke are leading risk factors for CVD; therefore, healthcare professionals must focus more efforts on smoking prevention and cessation.

Fortunately, most adult smokers want to quit, and 70% of all smokers visit healthcare professionals each year.[25] Usually these healthcare visits involve contact with a nurse. A recent Cochrane systematic review of 49 randomized clinical trials with over 17,000 participants found that nursing intervention increased the likelihood of smoking cessation.[7] Surprisingly, smokers simply offered advice to quit by an RN were more likely to quit than smokers with no intervention.[25,26]

Using the electronic medical record, all smokers should receive a low-intensity intervention from NPs and nurses. The American Academy of Nursing's position statement on tobacco control states that, "At a minimum, all nurses must assess tobacco use and willingness to quit on each and every client contact, provide advice to quit, and refer tobacco users to existing resources, including telephone quit lines," such as 1-800-QUIT-NOW.[27]

Benefits of physical activity, a healthy diet, and stress reduction

Although not listed specifically in the Million Hearts ABCS, physical activity (PA) and diet are modifiable risk factors that can significantly improve cardiovascular outcomes. The benefits of PA for the management of CVD risk factors are well established. Recent systematic reviews further confirm that adults engaging in regular aerobic exercise have been shown to decrease their systolic BP -2.42 to -16.2

mm Hg, decrease their diastolic BP -2.23 to -8.0 mm Hg, and decrease their hemoglobin A1c (HbA1c) -0.4% to -2.2%.[28-31] Reviews of clinical trials testing the effects of PA on plasma lipids have demonstrated less consistent results, demonstrating mixed findings in reductions of LDL-C and non-high-density lipoprotein (HDL-C), and in elevations of HDL-C.[29-32] However, the *2013 AHA/ACC Guideline on Lifestyle Management to Reduce Cardiovascular Risk* continues to advocate the use of PA to reduce both cholesterol and BP.[33]

Behavioral interventions have been found to be more effective than cognitive interventions in changing PA behavior. [34,35] These findings suggest interventions to increase PA should emphasize behavioral interventions, including: cues or prompts to be physically active; PA behavioral goals that specify timing, duration, and intensity of planned PA; written contracts about PA behavior; self-monitoring PA behavior; feedback about PA; and rewards for PA behavior that might include self- or other-administered rewards.

The *Guideline on Lifestyle Management to Reduce Cardiovascular Risk* also recommends a dietary pattern that emphasizes intake of vegetables, fruits, and whole grains, includes low-fat dairy products, poultry, fish, legumes, non-tropical vegetable oils and nuts, and limits the intake of sodium, sweets, sugar-sweetened beverages, and red meats.[33] The U.S. Department of Agriculture and the American Diabetes Association both recommend a Mediterranean-style diet for weight loss, cholesterol reduction, and glycemic control. The Mediterranean diet (supplemented with nuts) has been shown to significantly reduce CV-related and all-cause mortality in those at high risk for CVD and improve markers of glycemic control and inflammation.[36,37]

Stress is one mechanism thought to play a role in the development and maintenance of CVD, primarily through acute and chronic activation of the sympathetic nervous system.[38] Meta-analyzed data show that psychological interventions for patients with CVD appear to be effective in decreasing cardiac-related mortality.[39] Relaxation therapy specifically appears to be effective in decreasing the frequency of cardiac events, which include cardiac mortality, reinfarction, and the need for revascularization procedures. Transcendental meditation as a stress-reducing intervention shows promise in reducing systolic and diastolic BP, nonfatal MI and stroke, and cardiovascular and all-cause mortality.[40] Mindfulness-based stress reduction has shown promise in decreasing BP and promoting weight loss.[41]

Four groups for statin therapy[22]

- Individuals with clinical ASCVD (coronary heart disease, stroke, or peripheral arterial disease)
- Individuals with LDL cholesterol of 190 mg/dL or greater
- Individuals with diabetes mellitus ages 40 to 75 with LDL cholesterol 70 to 189 mg/dL
- Individuals without clinical ASCVD or diabetes mellitus ages 40 to 75 with LDL cholesterol 70 to 189 mg/dL and an estimated 10-year ASCVD risk of 7.5% or greater*

*10-year ASCVD risk is calculated using the newly developed Pooled Cohort Risk Assessment Equations.

Successful nursing practice models to promote improved cardiovascular outcomes

NPs and their national organizations are well positioned to make a difference in Million Hearts.[42] New care models including teams comprised of NPs and community health workers (CHW), nurse-led telephonic and tele-counseling healthy lifestyle educational programs, and interprofessional teams have demonstrated positive effects on CVD outcomes.

A team comprised of NPs and CHWs demonstrated significantly greater improvements in patients' total cholesterol, LDL cholesterol, triglycerides, systolic and diastolic BP, HbA1c, and perceptions of the quality of their chronic illness care than the control group.[43] Nurse-led telephonic and tele-counseling healthy lifestyle educational programs have improved BP control and increased adherence to healthy lifestyle recommendations. A nurse-led e-mail reminder program also led to improved CVD outcomes, including significantly less obesity, more fruit consumption, better controlled hypertension, and lower total cholesterol levels.[44]

Team-based care is so effective for BP control that the Community Preventive Services Task Force recommends this method to improve BP control.[45] One example of a successful NP-led interprofessional team-based model of care is a Health Resources and Services Administration funded health and wellness clinic at The Ohio State University. Led by the College of Nursing, the clinic targets four chronic conditions, including hypertension, hyperlipidemia, diabetes mellitus, and depression, and emphasizes the ABCS of Million Hearts. The NP-led team includes family NPs, a pharmacist, a dietitian, a mental health counselor, a psychiatric mental health NP, a social worker, and an RN case manager. This past year, findings from an outcomes evaluation indicated that 74.5% of patients with hypertension have a BP less than 140/90 mm Hg (a 23.33% improvement), and 83.5% of patients with diabetes have a BP of less than 140/90 mm Hg (a 21.6% improvement). In addition, 80.77% of current patients who are smokers and have diabetes had a cessation discussion in the past month. Press Ganey satisfaction scores are high, with 98.8% of the patients satisfied with provider-patient communication and

Recommendations for clinical practice, education, research, and health policy

Clinical practice recommendations based on best evidence

- Adults age 18 and older should be educated about Million Hearts and screened for the ABCS of Million Hearts as well as encouraged to know their numbers (e.g., BP, cholesterol).
- Healthcare providers must take a holistic approach to cholesterol management that includes suggesting increased PA, dietary and lifestyle modifications, and pharmacologic management in accordance with national guidelines.
- Education regarding healthy lifestyle behaviors must be incorporated into well and preventive visits across the life span to all, regardless of ethnicity, education level, or income status.
- Healthcare providers should routinely assess adherence to the prescribed lifestyle changes during follow-up appointments to evaluate patient adherence and motivation to continue on the regimen.
- PA should be routinely assessed in adults with a recommendation to engage in at least 150 minutes a week of moderate-intensity aerobic PA per week.
- Whenever feasible and appropriate, multiple counseling sessions and medication should be provided to patients trying to quit smoking.

Research recommendations

- Studies of psychological and stress-reducing interventions for CVD have primarily included subjects with diagnosed CVD. As stress is thought to play a role in the pathogenesis of CVD, more studies need to be conducted in younger, healthy subjects to evaluate the long-term effects of stress-reducing interventions on the primary prevention of CVD.
- Mediating and moderating variables should be assessed as part of RCTs that test strategies to prevent or treat CVD in order to explain the process through which intervention works and what factors influence outcomes.
- Dissemination/implementation studies are needed to determine which types of interventions result in the greatest uptake and implementation of evidence-based guidelines and recommendations with healthcare providers in real-world practice settings.
- Studies determining the impact of regional or national policies on health outcomes are needed.

Educational recommendations

- All nurses should take the healthcare professional Million Hearts pledge found at www.millionhearts.hhs.gov.
- All nursing and healthcare professional students should know their own cardiovascular numbers (such as BP, cholesterol, body mass index) and engage in healthy lifestyle behaviors.
- Educational programs should incorporate intense didactic and clinical experiences focused on CVD prevention and management, including evidence-based interventions to promote healthy lifestyle change in individuals, groups, and communities across the life span.
- Colleges should provide cultures and environments to promote healthy lifestyle behaviors in faculty, staff, and students.
- Colleges should incorporate Million Hearts into their educational programs. A free interprofessional educational module on Million Hearts is currently available through The Ohio State University Colleges of Nursing, Medicine and Pharmacy at http://millionhearts.osu.edu as part of the National Interprofessional Education and Practice Consortium to Advance Million Hearts. The goal of this national consortium is to screen and educate 100,000 people across the United States about Million Hearts by 2017.

Health policy recommendations

- Federal funding should be increased for additional NP-led team-based healthcare clinics and nursing interventions that incorporate CVD prevention and management across all ethnic and socioeconomic groups.
- All insurers should be required to competitively reimburse direct NP care for CVD prevention and treatment.
- Nurses must be represented in key federal and national discussions surrounding health policies.
- Parity and reimbursement for preventive interventions and counseling regarding healthy lifestyle behaviors must be provided across the life span.

92.3% of patients reporting that they would recommend this clinic to others.

Recommendations for clinical practice, education, research, and health policy

Based on a review of the ABCS of Million Hearts and the existing evidence on the benefits of healthy lifestyle modifications and interventions to prevent and manage CVD, a number of recommendations are made that need to be acted upon by NPs with a sense of urgency in order to ameliorate the adverse effects of CVD in individuals in the United States. These recommendations cover four areas, including clinical practice, research, education, and health policy (see *Recommendations for clinical practice, education, research, and health policy*).

NPs and the nation's health

The high prevalence of CVD calls for urgent action, including putting current evidence-based recommendations for prevention and early intervention into practice. Health promotion and treatment interventions by NPs have demonstrated positive outcomes in preventing and managing

CVD. Therefore, there is a need for increased funding for NP-led clinics and nursing interventions along with appropriate reimbursement for healthy lifestyle preventive interventions and counseling.

However, individual patient education and intervention is not enough. NPs need to understand the importance of cardiovascular population health. They need to employ leadership and intervention at the macrosystem level via role modeling evidence-based clinical practice guidelines, supporting health policy initiatives, conducting research, and incorporating population health into nursing education. Prevention needs to expand significantly if the nation is to sustain health and continue to care for the aging population. Million Hearts uses a set of evidence-based strategies to do just this—prevent 1 million heart attacks and strokes by 2017. By joining together in this initiative, NPs across the United States can make a positive impact on the nation's health.

REFERENCES

1. Frieden TR, Berwick DM. The "Million Hearts" initiative—preventing heart attacks and strokes. *N Engl J Med*. 2011;365(13):e27.
2. Centers for Disease Control and Prevention. Opportunities for engagement in Million Hearts™. 2012. www.cdc.gov/primarycare/materials/million-hearts.
3. U.S. Department of Health and Human Services Health Resources and Services Administration. The Registered Nurse population: findings from the 2008 National Sample Survey of Registered Nurses. 2010. http://bhpr.hrsa.gov/healthworkforce/rnsurveys/rnsurveyfinal.pdf.
4. Newton F. Congress retains low honesty rating: nurses have highest rating; car salespeople, lowest. 2012. www.gallup.com/poll/159035/congress-retains-low-honesty-rating.aspx.
5. Laidman J. Nurses remain nation's most trusted professionals. *Medscape Medical News*. 2012. www.medscape.com/viewarticle/775758.
6. Newhouse RP, Stanik-Hutt J, White KM, et al. Advanced practice nurse outcomes 1990-2008: a systematic review. *Nurs Econ* [serial online]. September 2011;29(5):230-251.
7. Rice VH, Hartmann-Boyce J, Stead LF. Nursing interventions for smoking cessation. *Cochrane Database Syst Rev*. 2013;8:CD001188.
8. Sargent GM, Forrest LE, Parker RM. Nurse delivered lifestyle interventions in primary health care to treat chronic disease risk factors associated with obesity: a systematic review. *Obes Rev*. 2012;13(12):1148-1171.
9. Vetter ML, Wadden TA, Chittams J, et al. Effect of lifestyle intervention on cardiometabolic risk factors: results of the POWER-UP trial. *Int J Obes (Lond)*. 2013;37(suppl 1):S19-S24.
10. Lin JS, O'Connor E, Whitlock EP, Beil TL. Behavioral counseling to promote physical activity and a healthful diet to prevent cardiovascular disease in adults: a systematic review for the U.S. Preventive Services Task Force. *Ann Intern Med*. 2010;153(11):736-750.
11. Farley TA, Dalal MA, Mostashari F, Frieden TR. Deaths preventable in the U.S. by improvements in use of clinical preventive services. *Am J Prev Med*. 2010;38(6):600-609.
12. U.S. Preventative Services Task Force. Aspirin for the prevention of cardiovascular disease. 2009. www.uspreventiveservicestaskforce.org/uspstf/uspsasmi.htm.
13. Parekh AK, Galloway JM, Hong Y, Wright JS. Aspirin in the secondary prevention of cardiovascular disease. *N Engl J Med.* 2013;368(3):204-205.
14. Pearson TA, Blair SN, Daniels SR, et al. AHA guidelines for primary prevention of cardiovascular disease and stroke: 2002 update: consensus panel guide to comprehensive risk reduction for adult patients without coronary or other atherosclerotic vascular diseases. American Heart Association Science Advisory and Coordinating Committee. *Circulation.* 2002;106(3):388-391.
15. Xie M, Shan Z, Zhang Y, et al. Aspirin for primary prevention of cardiovascular events: meta-analysis of randomized controlled trials and subgroup analysis by sex and diabetes status. *PLoS One.* 2014;9(10):e90286.
16. Go AS, Mozaffarian D, Roger VL, et al. Executive summary: heart disease and stroke statistics—2013 update: a report from the American Heart Association. *Circulation*. 2013;127(1):143-152.
17. James PA, Oparil S, Carter BL, et al. 2014 evidence-based guideline for the management of high blood pressure in adults: report from the panel members appointed to the Eighth Joint National Committee (JNC 8). *JAMA*. 2014;311(5):507-520.
18. U.S. Preventive Services Task Force. Final recommendation statement: blood pressure in adults (hypertension): screening. 2014. www.uspreventiveservicestaskforce.org/Page/Document/RecommendationStatementFinal/high-blood-pressure-in-adults-screening.
19. Go AS, Bauman MA, Coleman King SM, et al. An effective approach to high blood pressure control: a science advisory from the American Heart Association, the American College of Cardiology, and the Centers for Disease Control and Prevention. *Hypertension.* 2014;63(4):878-885.
20. Centers for Disease Control and Prevention. Vital signs: prevalence, treatment, and control of high levels of low-density lipoprotein cholesterol—United States, 1999-2002 and 2005-200. *MMWR. Morb Mortal Wkly Rep* [serial online]. February 4, 2011;60(4):109-114.
21. U.S. Preventive Services Task Force. Screening for lipid disorders in adults, topic page. 2008. www.uspreventiveservicestaskforce.org/uspstf/uspschol.htm.
22. Stone NJ, Robinson JG, Lichtenstein AH, et al. 2013 ACC/AHA guideline on the treatment of blood cholesterol to reduce atherosclerotic cardiovascular risk in adults: a report of the American College of Cardiology/American Heart Association Task Force on Practice Guidelines. *Circulation*. 2014;129(25 suppl 2):S1-S45.
23. U.S. Department of Health and Human Services. *Preventing Tobacco Use Among Youth and Young Adults: A Report of the Surgeon General*. Atlanta, GA: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Office on Smoking and Health; 2012. www.surgeongeneral.gov/library/reports/preventing-youth-tobacco-use/full-report.pdf.
24. Popova L, Ling PM. Alternative tobacco product use and smoking cessation: a national study. *Am J Public Health*. 2013;103(5):923-930.
25. Quitting smoking among adults—United States, 2001-2010. *MMWR. Morb Mortal Wkly Rep* [serial online]. November 11, 2011;60(44):1513-1519.
26. Stead LF, Perera R, Bullen C, et al. Nicotine replacement therapy for smoking cessation. *Cochrane Database Syst Rev*. 2012;11:CD000146.
27. Sarna L, Bialous SA, and Tobacco Control Sub-group and Health Behavior Expert Panel. Nursing scholarship and leadership in tobacco control position statement. American Academy of Nursing. 2013. www.aannet.org/policy-brief—nursing-scholarship-and-leadership-in-tobacco-control.
28. Chudyk A, Petrella RJ. Effects of exercise on cardiovascular risk factors in type 2 diabetes: a meta-analysis. *Diabetes Care*. 2011;34(5):1228-1237.
29. Hayashino Y, Jackson JL, Fukumori N, Nakamura F, Fukuhara S. Effects of supervised exercise on lipid profiles and blood pressure control in people with type 2 diabetes mellitus: a meta-analysis of randomized controlled trials. *Diabetes Res Clin Pract*. 2012;98(3):349-360.
30. Pattyn N, Cornelissen VA, Eshghi SR, Vanhees L. The effect of exercise on the cardiovascular risk factors constituting the metabolic syndrome: a meta-analysis of controlled trials. *Sports Med.* 2013;43(2):121-133.
31. Shaw K, Gennat H, O'rourke P, Del Mar C. Exercise for overweight or obesity. *Cochrane Database Syst Rev.* 2006;(4):CD003817.
32. Kelley GA, Kelley KS. Effects of aerobic exercise on lipids and lipoproteins in adults with type 2 diabetes: a meta-analysis of randomized-controlled trials. *Public Health*. 2007;121(9):643-655.
33. Eckel RH, Jakicic JM, Ard JD, et al. 2013 AHA/ACC guideline on lifestyle management to reduce cardiovascular risk: a report of the American College of Cardiology/American Heart Association Task Force on Practice Guidelines. *Circulation*. 2014;129(25 suppl 2):S76-S99.
34. Conn VS, Hafdahl AR, Brown SA, Brown LM. Meta-analysis of patient education interventions to increase physical activity among chronically ill adults. *Patient Educ Couns*. 2008;70(2):157-172.
35. Conn VS, Hafdahl AR, Mehr DR. Interventions to increase physical activity among healthy adults: meta-analysis of outcomes. *Am J Public Health*. 2011;101(4):751-758.
36. Estruch R, Ros E, Salas-Salvadó J, et al. Primary prevention of cardiovascular disease with a Mediterranean diet. *N Engl J Med*. 2013;368(14):1279-1290.
37. Nowlin SY, Hammer MJ, D'eramo Melkus G. Diet, inflammation, and glycemic control in type 2 diabetes: an integrative review of the literature. *J Nutr Metab*. 2012;2012:542698.

38. Steptoe A, Kivimäki M. Stress and cardiovascular disease: an update on current knowledge. *Annu Rev Public Health*. 2013;34:337-354.
39. Whalley B, Rees K, Davies P, et al. Psychological interventions for coronary heart disease. *Cochrane Database Syst Rev.* 2011;(8):CD002902.
40. Barnes VA, Orme-Johnson DW. Prevention and treatment of cardiovascular disease in adolescents and adults through the transcendental meditation program: a research review update. *Curr Hypertens Rev.* 2012;8(3):227-242.
41. Parswani MJ, Sharma MP, Iyengar S. Mindfulness-based stress reduction program in coronary heart disease: a randomized control trial. *Int J Yoga.* 2013;6(2):111-117.
42. Davies CA, Spence JC, Vandelanotte C, Caperchione CM, Mummery WK. Meta-analysis of internet-delivered interventions to increase physical activity levels. *Int J Behav Nutr Phys Act*. 2012;9:52.
43. Allen JK, Dennison-Himmelfarb CR, Szanton SL, et al. Community Outreach and Cardiovascular Health (COACH) Trial: a randomized, controlled trial of nurse practitioner/community health worker cardiovascular disease risk reduction in urban community health centers. *Circ Cardiovasc Qual Outcomes*. 2011;4(6):595-602.
44. Cicolini G, Simonetti V, Comparcini D, et al. Efficacy of a nurse-led email reminder program for cardiovascular prevention risk reduction in hypertensive patients: a randomized controlled trial. *Int J Nurs Stud*. 2014;51(6):833-843.
45. Guide to Community Preventive Services. Cardiovascular disease prevention and control: team-based care to improve blood pressure control. 2014. www.thecommunityguide.org/cvd/teambasedcare.html.

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