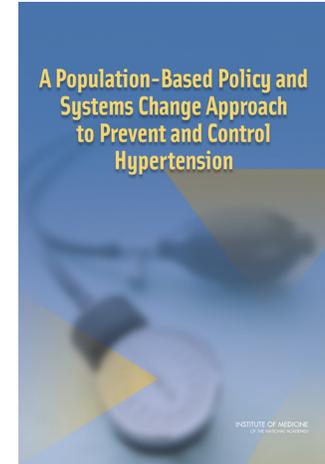


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A Population-Based Policy and Systems Change Approach to Prevent and Control Hypertension



Approximately 73 million Americans, or nearly one in three adults, has hypertension. Hypertension, or high blood pressure, is one of the nation's leading causes of death, responsible for roughly one in six deaths among adults annually. It also places huge economic demands on the health care system, estimated at \$73.4 billion in direct and indirect costs in 2009 alone. Hypertension is relatively easy to prevent, simple to diagnose, and inexpensive to treat.

The Centers for Disease Control and Prevention (CDC), through its Division for Heart Disease and Stroke Prevention (DHDSPP), provides national leadership to prevent, control, and reduce the impact of hypertension. To guide its efforts, the DHDSPP developed a strategic plan that identified a number of action areas and goals. In order to ensure that these efforts are targeted most effectively, the CDC asked the Institute of Medicine (IOM) to convene a committee to identify high-priority areas on which public health organizations and professionals should focus in order to accelerate progress in hypertension reduction and control.

As an overarching recommendation, the committee says the DHDSPP should give priority to population-based strategies that can reach large numbers of people and improve the well-being of entire communities.

Adopting Population-Based Strategies

The IOM committee's report, *A Population-Based Policy and Systems Change Approach to Prevent and Control Hypertension*, identifies priority areas for the DHDSPP's current and proposed hypertension prevention and control activities. As an overarching recommendation, the committee says the DHDSPP should give priority to population-based strategies that can reach large numbers of people and improve the well-being of entire communities. Population-based policy interventions and interventions directed at system improvements are

likely to be more practical and realistic in today's resource-constrained environment.

The committee also recommends that the DHDSP take the lead in strengthening hypertension surveillance and monitoring efforts. Data are critical for determining the burden of hypertension, characterizing the patterns among subgroups of the population, assessing changes in the problem over time, and evaluating the success of interventions. Effective monitoring and surveillance systems need to be in place to track progress in reducing the prevalence of hypertension and increasing the awareness, treatment, and control of hypertension.

In addition, the DHDSP should collaborate with state and local public health jurisdictions on a variety of behavioral and lifestyle interventions that target risk factors known to contribute substantially to hypertension. These risk factors include eating an unhealthful diet, consuming too much salt and too little potassium, being overweight or obese, and engaging in too little physical activity. Public health jurisdictions should integrate hypertension prevention and control interventions into their policies and programs in ways that will support healthy eating, active living, and obesity prevention across their respective communities. Jurisdictions also should align their efforts with populations most likely to be affected by hypertension, such as older populations, which often are not the target of these programs.

Cutting Sodium Intake

The DHDSP should work with various partners, including industry, to reduce sodium in the American diet. An estimated 87 percent of adults consume more than the recommended dietary guideline of 2.3 grams of sodium per day. The Division is well positioned to take greater leadership in reducing sodium risks through its role as co-leader for the heart disease and stroke prevention focus area of Healthy People 2010 and of the

National Forum for Heart Disease and Stroke, as well as through its sponsorship of grants to state health departments and other entities. The Division also should lead in developing better methods for assessing and tracking specific foods that are important contributors of dietary sodium, along with better methods for assessing and tracking sodium intake across various populations. The current lack of such data presents a significant gap that will hamper efforts to evaluate the progress made in reducing sodium intake in the American population.

State and local health jurisdictions also can play a strong role in this effort, and every jurisdiction should immediately begin to consider developing a portfolio of strategies aimed at reducing dietary sodium intake in their population.

Ensuring Adequate Potassium Intake

One of the most prevalent and modifiable risk factors for hypertension is an inadequate consumption of potassium. Only about 2 percent of U.S. adults meet the current guideline for dietary potassium intake (at least 4.7 grams per day). The gap in the number of blacks and hispanics who do not meet this guideline is even greater. The DHDSP should work with state and local partners to develop and implement interventions to encourage people to eat potassium rich foods, particularly fruits and vegetables. In addition, as with sodium, the Division should foster efforts to develop better methods for assessing and tracking potassium intake.

Reducing Risks Among People with Hypertension

Just as it will be important to ensure that individuals take steps to prevent or treat hypertension, it will also be necessary to improve how well physicians meet the needs of their patients. Today, many physicians are not providing treatment consistent

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with practice guidelines developed by the Joint National Committee on Prevention, Detection, Evaluation, and Treatment of High Blood Pressure (JNC), a coalition of organizations and federal agencies that issue guidelines when warranted by scientific advances. The DHDSP should conduct research to understand the reasons behind poor physician adherence to current guidelines. Once these factors are better understood, the Division should lead in developing strategies to increase the likelihood that primary providers will screen for and treat hypertension appropriately, especially in elderly patients.

The DHDSP also should work with the health care quality community to improve provider adherence to JNC's guidelines for hypertension screening and treatment. For their part, state and local health jurisdictions should serve as conveners of health care system representatives, physician groups, purchasers of health care services, quality improvement organizations, and employers, among others, to develop a plan to leverage skills and resources for improving the medical treatment of hypertension.

Fostering Collaborations with Community Health Workers

The DHDSP should explore ways to make increased use of community health workers, who in many instances have contributed to higher medication adherence among individuals with hyper-

tension and have played important roles in linking diverse communities to the health care system. Although trained laypeople cannot perform in the same capacity as professional nurses and health educators, with appropriate training and supervision they can successfully contribute to the care of community members with hypertension. Thus, the Division should work with state partners to ensure that existing community health worker programs include a focus on the prevention and control of hypertension.

Working with the Private Sector

It will be important for the DHDSP to reach beyond the public health community as well. In particular, the Division is well positioned to show leaders in the business community that eliminating or reducing the costs of antihypertensive medications is an efficient way to increase medication adherence. Employers may thus be encouraged to leverage their health care purchasing power to advocate for reduced deductibles and copayments for antihypertensive medications in their health insurance benefits packages.

Addressing Resource Needs

The committee concludes that the DHDSP's hypertension program is dramatically underfunded, relative to the preventable burden of disease and the action plan that the CDC has developed. In an era



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of declining resources and conflicting priorities for public health, taking on any new challenge needs careful consideration. But given the current climate of health care reform and increasing attention to prevention, there is no better time to rise to the challenge. The committee recommends that Congress provide the DHDSP with adequate resources for implementing a broad suite of population-based policy and system approaches at the federal, state, and local levels that have the greatest promise to prevent, treat, and control hypertension.

Conclusion

The committee acknowledges that the recommendations offered, if adopted, would result in a significant programmatic change for the DHDSP. In the short term, one visible impact would be strong federal, state, and local public health agency leadership that emphasizes population-based approaches integrated throughout agency activities, particularly those that target hypertension risk factors. Focusing attention on these high priority areas would ultimately lead to significant public health improvement—a reduction in the prevalence of hypertension, improvement in the quality of care provided to individuals with hypertension, a reduction in health disparities, and ultimately, reduced mortality and morbidity due to heart disease and stroke. 🌐

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