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

David Fleming, MD
Chair
Committee on Public Health Priorities to Reduce and Control Hypertension

February 18, 2010
Committee

David Fleming, MD (Chair)
Ana Diez Roux, MD, PhD, MPH
Jiang He, MD, PhD
Kathy Hebert, MD, MPH, MMM
Corrine Husten, MD, MPH
Sherman James, PhD
Howard Koh, MD, MPH (Chair, January-March 2000)
Thomas Pickering, MD, DPhil. (deceased)
Geoffrey Rosenthal, MD, PhD
Walter Willett, MD, Dr.PH
Charge to the Committee

Identify Small Set of High Priority Areas in which Public Health Can Accelerate Progress in Hypertension Reduction and Control:

- Identify role of DHDSP, state health departments, other public health partners
- Impact of focusing on the priority areas
- Impact indicators
- Impact on health disparities and potential indicators
Approach to Charge

• Public data-gathering meetings
• Review of relevant literature
• Identification strategies to shift the population distribution of blood pressure and reduce the consequences of high blood pressure
  • Assessment of potential strategies
    ▪ Impact
    ▪ Effectiveness
    ▪ Cost
    ▪ Uniqueness to CDC and partner roles
    ▪ Synergy with other CDC programs
    ▪ Reduction in disparities
Findings

• Hypertension is a neglected disease

• Hypertension is relatively easy to prevent, simple to diagnose, inexpensive to treat yet undiagnosed and uncontrolled cases are occurring at an alarming rate event though many people with hypertension see their doctors regularly
Findings

Division of Heart Disease and Stroke Prevention has leveraged its broader CVD prevention and control program to address hypertension but....

• Hypertension is only one component of a program that has more of a medical care than a population-based prevention focus based on system change
• CDC’s CVD program is dramatically under funded given the relative to the preventable burden of the disease

6.8 The committee recommends that the Congress give priority to assuring 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 HTN.
Committee’s Recommendations

Promote policy and systems change approaches to:

• Improve quality of care by assuring that individuals who should be in treatment are and receive care that is consistent with current guidelines
  - Increase awareness of the importance of treating systolic hypertension
• Remove economic barriers to effective antihypertensive medications
• Provide community based support for individuals with HTN through community health workers
Committee’s Recommendations

Seek to:
Prioritize population-based strategies to:

- Strengthen collaboration among CDC units and partners to ensure HTN is included in other population-based activities especially those around healthy lifestyle improvement, greater consumption of potassium rich fruits and vegetables, increased physical activity and weight management
- Strengthen CDC’s leadership in monitoring and reducing sodium intake
- Improve surveillance and reporting of HTN
Recommendations to Enhance Population–based Efforts and to Strengthen Efforts among CDC Units and Partners

4.1 DHDSP should integrate HTN prevention and control in programmatic efforts to effect system, environmental, and policy changes through collaboration with other CDC units and their external partners. High priority programmatic activities to collaborate on include interventions for:
- reducing overweight and obesity
- promoting the consumption of a healthy diet
- increasing potassium rich fruits and vegetables in the diet
- increase physical activity.

4.2 Population-based interventions to improve physical activity and food environments (in other CDC units) should include an evaluation of their feasibility and effectiveness and their specific impact on HTN prevalence and control.
Recommendations to Enhance Population–based Efforts and to Strengthen Efforts among CDC Units and Partners

4.3 DHDSP should leverage ability to shape state activities through grant making and cooperative agreements to shift state activities toward population-based prevention of HTN.

6.1 SLHJ should give priority to population-based approaches to prevent and control HTN.

6.2 SLHJ should integrate HTN prevention and control in efforts to effect system, environmental, and policy changes to support healthy eating, active living, and obesity prevention. Programs should be assessed to ensure they are aligned with populations most likely to be affected by HTN such as older populations.
Recommendations to Improve the Surveillance and Reporting of Hypertension and Risk Factors

2.1 DHDSP should identify methods to better use (analyze and report) existing data on the monitoring and surveillance of HTN over time and develop norms for data collection, analysis, and reporting of future surveillance of BP levels and HTN. DHDSP should increase and improve analysis and reporting of understudied populations including: children, racial and ethnic minorities, the elderly and socioeconomic groups.
Recommendations to Improve the Surveillance and Reporting of Hypertension and Risk Factors

6.4 SLHJ should assess their capacity to develop local HANES as a means to obtain local estimates of the prevalence, awareness, treatment and control of HTN. Further, funding should be made available to assure that localities have relevant data that will assist them in addressing HTN in their communities.
Recommendations to Improve the Surveillance and Reporting of Hypertension and Risk Factors

4.6 DHDSP and other CDC units, should explore methods to develop and implement data-gathering strategies for more accurate assessment and tracking of specific foods that contribute to dietary sodium intake by the Americans.  
4.7 DHDSP and other CDC units should develop and implement data gathering strategies that will allow for a more accurate assessment and the tracking of population-level dietary sodium and potassium intake including the monitoring of 24-hour urinary sodium and potassium excretion.
Recommendations to Strengthen Leadership in Reducing Sodium Intake and Increasing Potassium Intake

4.4 DHDSP should convene other partners to advocate for and implement strategies to reduce sodium in the diet to meet dietary guidelines, which are currently less than 2.3 grams and 1.5 grams for blacks, middle-aged and older adults, and individuals with HTN.

6.3 SLHJ jurisdictions should immediately begin to consider developing a portfolio of dietary sodium reduction strategies that make the most sense for early action in their jurisdiction.
Recommendations to Strengthen Leadership in Reducing Sodium Intake and Increasing Potassium Intake

4.5 DHDSP should specifically consider as a strategy, advocating for the greater use of potassium/sodium chloride combinations as a means of simultaneously reducing sodium intake and increasing potassium intake.
System Change Recommendations Directed at Individuals with Hypertension

Recommendations to Improve the Quality of Care Provided to Individuals with Hypertension

5.1 DHDSP should give high priority to conducting research to understand the reasons behind poor physician adherence to current JNC guidelines. Once factors are understood, develop strategies to increase the likelihood that primary providers will screen for and treat HTN appropriately, especially in elderly patients.
Recommendations to Improve the Quality of Care Provided to Individuals With Hypertension

5.2 DHDSP should work with the Joint Commission and the healthcare quality community to improve provider performance on measures focused on assessing adherence to guidelines for screening for HTN, the development of a HTN disease management plan that is consistent with JNC guidelines, and achievement of blood pressure control.

6.5 SLHJ should convene health care system representatives, physician groups, purchasers of health care services, quality improvement organizations, and employers to develop a plan to engage, and leverage skills and resources for improving the medical treatment of HTN.
Recommendations to Remove Economic Barriers to Effective Antihypertensive Medications

5.3 DHDSP should work with:
• CMS Medicare Part D and state Medicaid programs to recommend the elimination or reduction of deductibles for antihypertensive medications
• with the pharmaceutical industry and trade organizations to standardize and simplify applications for patient assistance programs that provide reduced-cost or free antihypertensive medications for low-income, underinsured or uninsured individuals.
Recommendations to Remove Economic Barriers to Effective Antihypertensive Medications

**5.4** DHDSP should collaborate with business community to encourage employers to leverage their healthcare purchasing power to advocate for reduced deductibles and copayments for antihypertensive medications in their health insurance benefits packages.

**6.6** SLHJ should work with business coalitions and purchasing coalitions to remove economic barriers to effective antihypertensive medications for individuals who have difficulty accessing them.
Recommendations to Provide Community Support for Individuals with Hypertension

5.5 DHDSP should work with state partners to ensure that existing community health worker (CHW) programs include a focus on the prevention and control of HTN and work with state partners to develop programs of CHWs who would be deployed in high-risk communities to help support healthy living strategies that include a focus on HTN.

6.7 SLHJ should promote and work with CHW initiatives to ensure that prevention and control of HTN is included in the array of services they provide and are appropriately linked to primary care services.
Measurement and Accountability

6.9 The DHDSP should develop resource accountability systems to track and measure all current and new State programs for the prevention, treatment and control of HTN that would allow for resources to be assessed for alignment with the population-based policy and systems strategy and for measuring the outcomes achieved.
Measurement and Accountability

6.10 The DHDSP should identify and work with experts grounded in population-based approaches to provide guidance and assistance in designing and executing HTN prevention and control efforts that focus on population-based policy and system change. These experts could augment an existing advisory body or be drawn from an existing body with this expertise.
Hypertension as a Sentinel Indicator for Health Disparities

Hypertension is a disease for which there are major inequities across racial groups and economic groups – along the entire spectrum from risk factors to delivery of medical care.

- HTN prevalence may be a quick and objective measure of programs directed at risk factors as well as underlying social determinants of health.
- HTN also a potentially very good marker for lack of access to or continuity of health care in a community. SLHJs should consider HTN as a sentinel measure for evaluation of the effectiveness of a range of disparity-reducing activities, including place-based strategies for tackling conditions through community policy interventions.
Hypertension as a Sentinel Indicator for Chronic Disease Programs

HTN provides a single, reliable outcome measure that can be linked to intervention process measures to rapidly inform program interventions

- Objectivity
- Low cost
- Ease and reproducibility
- Rapid response