

Chronic Disease Prevention and Control: A Wise Investment

The dialogue in Washington is circling around what and how much to cut and all sides of the debate use the analogy of a family budget. The problem with this debate and analogy is that when faced with a financial crisis families don't just cut – they spend carefully and wisely on essential priorities. It is essential that leadership understand that to effectively adopt the analogy, they must adopt the whole analogy.

Let us consider another analogy; cutting prevention programs is tantamount to skipping oil changes knowing you'll replace the engine somewhere down the road. It doesn't make sense for individuals – and it doesn't make sense for public policy.

Let's Face the Facts:

At the turn of the 20th century, the major causes of death and disease were markedly different from today. Today the challenges from infectious diseases such as tuberculosis, diarrhea and similarly transmitted diseases have been far surpassed by chronic diseases such as diabetes, heart disease & stroke, and cancer.

- Seven out of 10 people, or more than 1.7 million, die of a chronic disease.
- Five chronic diseases heart disease, cancer, stroke, chronic obstructive pulmonary disease, and diabetes cause more than 2/3 of all deaths each year.
- One-third of the years of potential life lost before age 65 are due to chronic diseases.

However, deaths alone don't convey the full impact of chronic disease. These serious diseases, by definition, are lifelong conditions that are often manageable but not curable. An even greater burden befalls Americans from the disability and diminished quality of life resulting from chronic disease. This burden is shared by adults, adolescents and children of all ages and American taxpayers and business bear the brunt of the economic impact.

- More than 133 million Americans live with at least one chronic condition.
- Diabetes is the primary cause of amputation, kidney failure, and adult blindness.
- Arthritis is the number one cause of disability, affecting nearly one of every three adults.
- Stroke has left 1 million Americans with disabilities; many can no longer perform daily tasks, such as walking or bathing, without help.

Almost every family is adversely affected by chronic diseases in one way or another – through the death of a loved one; family members with life-long illness, disability, or compromised quality of life; or the huge personal and community financial burden wrought by these diseases.

When we measure our nation's health not just by the length of life, but by the quality of that life, we cannot ignore the urgency of chronic disease. Taken in its entirety, chronic diseases account for more than 75% of the nation's health care costs – or over \$2 trillion in 2005.

As a nation, we have emphasized expensive cures for disease rather than cost-effective prevention of disease. At the heart of our system is the traditional physician-patient interaction. These traditional systems no longer meet our changing health care needs. Whether sick or well, an individual spends far more time living in other environments (school, work, and neighborhood), making independent decisions that affect his or her health and he or she does so with minimal training or information.

- When we realize that over 75% of all our healthcare costs relate to chronic diseases and much of that cost is preventable;
- When we realize that America is ranked over 40th on level of health performance by the World Health Organization, but we are first by far in the amount we spend;
- When we realize that we are overweight as a people beginning with young children, and the environments we create for ourselves are a major factor;
- When we realize that one in three children born today could develop diabetes in their lifetime:
- When we realize that most Americans over the age of 45 have a chronic disease, and many have more than one;
- When we realize that we are often our own worst enemy when it comes to our health;

The Answer is Clear: Change is Overdue.

We have created a culture where the healthy choice is often the hardest choice at every stage of our lives. We know we need to eat better, be more active and avoid tobacco - but we're cutting back on recess and physical education, cutting back on the ability to be active in our everyday lives and tobacco is still all too available, especially to children. Good, healthy food options are more available today - but not everywhere - and not for everyone. The Healthy Community Movement led by groups like the Robert Wood Johnson Foundation, YMCA, National Association of Chronic Disease Directors, America on the Move and others, supported and evaluated by CDC, state health departments, is having an impact in communities large and small. But this isn't enough - not by a long stretch. If we are serious about improving the lives of Americans, having an impact on healthcare costs, reforming our system, reducing disparities - we need to invest in a meaningful way in prevention.

Chronic disease prevention and control programs save lives and money!

Diabetes

- Healthcare costs for a person with diabetes are over \$13,000/year; for a person without diabetes, \$2,500. For every one point reduction in HbA1c (a measure of blood sugar over time), a 40% reduction in microvascular complications is reported (blindness, kidney disease, nerve damage) and up to \$4,100 can be saved in annual healthcare costs.
- Medical expenses for people with diabetes are more than two times higher than for people without diabetes
- More than two thirds of persons with diabetes have high blood pressure- the risk for stroke is two to four times higher among persons with diabetes

Heart Disease and Stroke

• In over 70% of Americans with hypertension, blood pressure is poorly controlled. A 12- 13 point reduction in systolic blood pressure can reduce heart attack risk by 21% and stroke risk by 37%. In addition to the individual and family devastation, a heart attack costs \$78,221 in the first 90 days.

Cancer

- Public Health early detection programs for breast and cervical cancer have been responsible for identifying many thousands of cancers in early stages when treatment is more effective and less expensive.
- For example, treatment of early stage breast cancer costs \$11,000, diagnosis at a late stage means more intense treatment that may not be as effective and costs \$140,000.
- Treatment of early stage cervical cancer costs \$2,000, diagnosis at a late stage means more intense treatment that may not be as effective and costs \$30,000.

We know what can be done to impact our health in a positive way - but instead we are investing more and more on fixing ourselves when we have chronic diseases. The minimal investment in chronic disease prevention and control at CDC and state and community based programs supported by CDC has resulted in developing an extensive portfolio of strategies that work.

Bringing Chronic Disease Prevention Up to Scale

Today, only a fraction of 1% of our governmental healthcare investment goes to prevention - this is a crime when we know better. States are implementing diverse, cost-effective strategies that work for early detection of cancer, prevention and control of diabetes, reduction of heart disease and stroke, reduction of the disability associated with all these conditions and arthritis as well (www.chronicdisease.org). The state success stories on the referenced web page are just the tip of the iceberg. There needs to be a substantial investment in CDCs National Center for Chronic Disease Prevention and Health Promotion. This small part of the federal government is the locus of activity

that has provided the science and hope we need for the future. The investment needs to be such that every state has a cadre of evidenced-based programs to fight chronic disease.

These must all include:

Early Detection of Cancer and Cancer Survivorship Services
Diabetes Prevention and Control (including prevention of kidney disease)
Heart Disease and Stroke Prevention
Healthy Community Programs (ACHIEVE, REACH, others)
Tobacco Prevention and Control
Arthritis Prevention and Control
School Health and Oral Health Programs
Healthy Aging - including Alzheimer's Disease
Programs to improve physical activity and nutrition

There has been discussion from several policymakers on the potential of consolidation of some or all of these programs. It is essential in thinking about any consolidation that key principles frame the discussion:

- Success in chronic disease prevention and control is achieved with important partners – these partners must continue to have a seat at the table at the state and national level.
- Any changes to funding framework should recognize the need to enhance states'
 capacity to implement evidence-based programs through stable and predictable
 funding mechanisms. We suggest at a minimum that revisions to the funding
 framework include a formula based on population with consideration for disease
 burden and disparities.
- The scientific expertise on diseases and risk factors is the backbone of our success to date. This expertise at CDC and in states must be maintained if we are to achieve the human and financial goals of prevention.
- Change should always have a stated purpose and a goal that can be measured.
 Any consolidation of activities should be discussed with the improvement that can be achieved in mind.
- To be successful, the prevention and control of chronic diseases must by definition address Americans across the life span; in rural, suburban and urban areas; at every stage of risk/disease; in all economic circumstances; where we live, work, worship, play and access healthcare.

At a time when our investment in housing, education, and medical care has each outstripped inflation, our investment in prevention has lagged far behind. Today we fund prevention efforts at approximately the same amount we did in 2001 – effectively a funding cut of 22.92% when inflation is considered.

The Time is Now

America is on the precipice of great challenges and great opportunities; we need to invest in a meaningful way in prevention now. The place to start is at CDC, with the state-based programs mentioned above. An investment of an additional \$750 million this year from the Prevention and Public Health Fund created in the Affordable Care Act would allow the programs listed above to have a presence in every state and many communities across America. According to Trust for America's Health in their July 2008 report "Prevention for a Healthier America" the return on investment for public health prevention programs is 0.96:1 in years one and two and 5.6:1 by year five. This means that even in the initial budget period there would be a net gain by investing in prevention. (http://healthyamericans.org/reports/prevention08/)

Public health programs work to improve care, prevent disease, and prevent complications of disease. An investment in chronic disease prevention and control programs saves lives, improves quality of life and saves healthcare dollars.

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