Robert Wood Johnson Foundation

POLICY HIGHLIGHT BRIEF
APRIL 2013

Return on Investments in Public Health: Saving Lives and Money

Background

The Patient Protection and Affordable Care Act (PL 111-148) included the creation of the Prevention and Public Health Fund, originally constructed as a 10-year, $15 billion commitment to support programs, medical screenings, and research related to public health and prevention. Since its creation, a total of $2.25 billion has been appropriated: $500 million in FY2010,[1] and $750 million in FY2011,[2] and $1 billion in FY2012.

A subsequent law enacted in February 2012 cut the Fund by $5 billion over 10 years.[3] Nevertheless, mandatory funding for this groundbreaking initiative still includes an additional $1 billion annually between FY2013 and FY2017, $1.25 billion annually in FY2018 and FY2019, and $1.5 billion annually in FY2020 and FY2021. Since the Fund is designed to be ongoing, $2 billion will be allocated annually in FY2022 and each year thereafter.[4]

This funding is distributed to programs aligned with the National Prevention and Health Promotion Strategy, our country's first-ever comprehensive action plan for improving the health of all Americans. The Strategy outlines four overarching areas on which the nation's prevention efforts should focus: building healthy and safe communities; expanding quality preventive services in both clinical and community settings; empowering people to make healthy choices; and eliminating health disparities.[5]

This national commitment to and investment in preventing disease before it occurs is in line with evidence from a variety of recent reports and studies indicating that strategic investments in proven, community-based prevention programs could result in significant U.S. health care cost savings and overall economic cost savings. This brief summarizes the findings and recommendations from four major studies released between 2008 and 2011.

Key Findings and Recommendations

- **A July 2011 study published in the journal *Health Affairs* found that increased spending by local public health departments can save lives currently lost to preventable illnesses.**[6] Researchers Glen P. Mays and Sharla A. Smith mapped spending by local public health agencies from 1993-2005 with preventable mortality rates in each agency's respective jurisdiction. The report found:

FAST FACTS

Health Care Spending in the United States

- Chronic conditions such as heart disease, cancer, stroke and diabetes are responsible for seven in 10 deaths among Americans each year, and account for nearly 75 percent of the nation's health spending.[11] More than 40 percent of the population has more than one chronic health condition.[12]
- Preventing disease and injury is the most cost-effective, common-sense way to improve health in the United States. Too often, however, the health care system focuses more on treating disease and injury after they happen. America spends $2.6 trillion annually on health care—more than any other nation.[13]
- The United States spends hundreds of billions of dollars annually to treat preventable illnesses and diseases. For instance, health care expenditures tied just to smoking total $96 billion.[14] Costs associated with conditions caused by obesity are also astronomical, including nearly $17 billion for diabetes and more than $43 billion for hypertension.[15]
- For every dollar spent on health care in the United States today, only about four cents goes towards public health and prevention.[16]

- On average, local public health spending rose from $34.68 per capita in 1993 to $40.84 per capita in 2005—an increase of more than 17 percent.

- For each 10 percent increase in local public health spending, there were significant decreases in infant deaths (6.9 percent drop), deaths from cardiovascular disease (3.2 percent drop), deaths from diabetes (1.4 percent drop), and deaths from cancer (1.1 percent drop).

- The 3.2 percent decrease in cardiovascular disease mortality cited above required local health agencies to spend, on average, an additional $312,274 each year. In contrast, achieving the same reduction in deaths from cardiovascular disease by focusing on treatment and other traditional health *care* approaches would require an additional 27 primary care physicians in the average metropolitan community. To put this comparison in perspective, the median salary for a single primary care physician was $202,392 in 2010—as a result, 27 primary care physicians would cost nearly $5.5 million, or more than 27 times the public health investment.[7]

- **Recommendation: Sustain public health investments to improve community health outcomes and reduce medical costs in the long-term. Additional public health spending would be expected to generate substantial health improvements over time.**

- **A 2011 Urban Institute study concluded that it is in the nation's best interest from both a health and economic standpoint to maintain funding for evidence-based, public health programs that save lives and bring down costs.** Authors Timothy Waidmann, Barbara Ormond and Randall Bovbjerg examined the financial costs and health ramifications of ignoring disease prevention. The study[8] found:

- The American health care system currently spends $238 billion per year in "excess costs"—defined as the difference between the cost of care for people with preventable chronic disease and those without—to treat people with type 2 diabetes, hypertension, heart disease and stroke. More than half of those costs are financed through Medicare and Medicaid. Left unchecked, those excess costs would rise to $466.5 billion per year by 2030, with nearly $300 billion financed by Medicare and Medicaid.

- By 2030, if current trends continue for chronic diseases among all persons ages 45-64, one-third will have hypertension, more than one-quarter will have diabetes, more than 11 percent will have heart disease, and nearly two percent will have strokes. Similar prevalence rate increases can be expected for persons ages 65 or older—in particular, more than half of persons in this age group will have diabetes and/or hypertension. These increases will affect not just public sector budgets but private sector costs and competitiveness.

POLICY PERSPECTIVE

Community Transformation Grants

- Community Transformation Grants[17] (CTG's) were announced in May 2011 by the Department of Health and Human Services as a new component of the Prevention and Public Health Fund.

- CTG's, which are administered by the Centers for Disease Control and Prevention (CDC), are aimed at helping communities implement projects proven to reduce chronic diseases. All CTG-funded programs have specific target goals and are subject to rigorous evaluation criteria.

- An initial $103 million in grant funding was awarded to 61 states and communities in September 2011[18] to support the following priority areas: tobacco-free living; active living and healthy eating; and quality clinical and other preventive services, with a specific focus on controlling high blood pressure and high cholesterol.

- Of the 61 grantees—which are located in 36 states and serve a combined 120 million residents—35 are implementing proven health and wellness interventions, while 26 are working to lay a foundation for sustainable community prevention efforts.

- In September 2012, the CDC expanded the CTG program by allocating an additional $70 million toward Small Communities—areas with populations less than 500,000.[19]

– Slowing the rate of growth of these chronic diseases will save lives and money. For instance, cutting the rate of chronic disease growth by even five percent would save Medicare and Medicaid $5.5 billion per year by 2030; cutting the rate of chronic disease growth by 25 percent would save $26.2 billion per year; and cutting the rate of chronic disease growth by 50 percent would save $48.9 billion per year.

– Investments in primary prevention programs will not only help slow the chronic disease rate, but have also been shown to lower private insurance costs and improve economic productivity while reducing worker absenteeism. In fact, savings achieved through prevention programs can significantly and quickly outweigh initial, upfront investments.

– **Recommendation: Preserve and sustain primary prevention programs for chronic diseases in order to save lives and reduce costs.**

- **A May 2011 study published in *Health Affairs* showed that a *combination* of three strategies—expanding health insurance coverage, delivering better preventive and chronic care, and focusing on "protection" (a specific prevention strategy defined as enabling healthier behavior and safer environments)—is more effective at saving lives and money than implementing any one of these strategies alone.** A team of researchers led by Bobby Milstein tested all three strategies in a dynamic simulation model of the United States health care system. The report[9] found:

– While all three strategies save lives and improve economic conditions, insurance coverage and medical care for chronic conditions lead to an increase in health costs.

– Of the three, only the preventive steps taken through protection efforts slow the growth in the prevalence of disease and injury, alleviating the demand on limited primary care capacity.

– Adding preventive protection elements to an expansion of insurance coverage and medical care could save 90 percent more lives and reduce costs by 30 percent within 10 years; those figures rise to 142 percent and 62 percent, respectively, within 25 years.

– **Recommendation: Ensure that efforts to protect health and encourage healthy behavior– are a core element of disease prevention.**

INSTITUTE OF MEDICINE STUDY

Assessing the Value of Community-Based Prevention[20]

- In November 2012, an Institute of Medicine committee proposed a framework to assess the value of community-based, non-clinical prevention policies and wellness strategies. The committee recommended that a framework meet three major criteria:

- Quantifying the benefits and harms in individual's physical and mental health (i.e. declines in mortality, reduced incidence of disease rates and increases in health-related quality of life) and community well-being/process (i.e. social norms, people's willingness to invest in themselves and those around them, and level of civic engagement).

- Assessing of the value of each intervention—such as through a cost-benefit analysis—that measures the resulting positive or negative effects.

- Accounting for the specific differences among communities—such as regional differences associated with social, environmental, and behavioral risk factors—that can affect the link between interventions and outcomes.

- **In 2008, Trust for America's Health and the Robert Wood Johnson Foundation released a report showing that an investment of $10 per person annually in proven, community-based public health programs could save the United States more than $16 billion within five years—a $5.60 return for every $1 invested.** The report—based on a model developed by researchers at the Urban Institute and a review of studies conducted by the New York Academy of Medicine—focused on community-based disease prevention programs that do not require medical care. Additional findings[10] included:
  - The $16 billion in savings would be spread through Medicare ($5 billion), Medicaid ($1.9 billion), and private payers ($9 billion).
  - Every state in the nation would be on the receiving end of potential return on investment within that five-year period, ranging from a rate of 3.7 to 1 at the low end to 9.9 to 1 on the high end.
  - **Recommendation: As a significant cost-savings measure, policymakers at all levels of government should invest in disease prevention programs that are separate and distinct from those that require traditional medical care.**

PREVENTION AND PUBLIC HEALTH INITIATIVES

Community Policy and Program Success Stories[21]

- **Active living and school nutrition in Alabama[22]:** In Jefferson County, prevention funds were used to develop walkable greenways and other open spaces, and promote exercise as medicine through employer-sponsored flexible spending accounts. The Jefferson County Public Schools also initiated a program to contract with local growers to add local produce as part of school lunches—56 county schools are now participating in the program.
- **Tobacco reduction in Georgia[23]:** The Dekalb County Board of Health unanimously passed a resolution endorsing a smoke-free air ordinance, while Oglethorpe University signed a formal agreement to make all of its campuses tobacco-free. Prevention funds are being used to enhance smoking cessation programs and to support pricing strategies designed to decrease tobacco usage.
- **Healthy foods in Kentucky[24]:** In Louisville, the Healthy Hometown Restaurant Initiative led to the calculation and printing of calorie information of menu items at 18 restaurants that serve more than 435,000 people. Additionally, Jefferson County Public Schools used grant funding to create a Community Action plan that reduced sodium and sugar in school meals, and increased the amount of food brought into schools by local farmers and through school gardens.

Endnotes

1 http://www.hhs.gov/news/press/2010pres/06/20100618g.html
2 http://www.hhs.gov/news/press/2011pres/02/20110209b.html
3 http://www.gpo.gov/fdsys/pkg/BILLS-112hr3630enr/pdf/BILLS-112hr3630enr.pdf
4 http://healthyamericans.org/health-issues/wp-content/uploads/2012/11/PPHF-Background-Fact-Sheet1.pdf
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