Public Health Prevention Interventions and Healthcare Spending

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Master of Public Health Program
Agenda

• Healthcare Spending and Prevention
• Controversy Over Prevention and Potential Savings
• Costs/Savings Associated with Prevention Interventions
• Prevention Policy and Stakeholders
• Recommendations for Addressing the Role of Prevention in Efforts to Reduce Healthcare Spending
Healthcare Spending, Chronic Disease, and Health Behaviors

- Approximately 75% of the total $2.7 trillion healthcare spending is directed at treating chronic diseases.
- Roughly 60% of the growth in spending is attributable to individuals’ worsening health habits, especially the meteoric rise in obesity.
Healthcare Spending, Chronic Disease, and Health Behaviors

- “For every dollar spent on health care in the United States today, only about four cents goes towards public health and prevention.” (Meyer J, and Weiselberg, 2009)

- The US spends more money on administrative overhead within the healthcare system than it does on public health activities.
Prevention as a Potential Means for Reducing Spending

- Most preventive measures, up to 80% of them, actually *increase* healthcare costs.
- Research involving public health approaches to prevention has demonstrated cost-saving successes.
Potential for Public Health Prevention

- The definitive issue of prevention is the actual *avoidance* of disease.

- Not all prevention is clinical; there is also public health prevention.
US Health Status

• More than half of Americans are living with at least one chronic disease.

• Chronic diseases account for 7 out of 10 deaths among Americans every year.

• “Nine preventable conditions are responsible for more than 50% of all deaths in the United States.” (Gostin et al, 2011)
Does Prevention Save Money?

**NO**
Screenings, diabetes and asthma management, & hypertension and cholesterol meds actually increase healthcare costs

**YES**
Specific, evidence-based clinical preventive services successfully reduce healthcare costs
Arguments Over Prevention

• In the minds of lawmakers and citizens, “prevention means getting mammograms, colonoscopies, Pap tests, prostate screens, and full body scans. “Although these are called preventive services, they are actually screenings for disease in early stages of development.” (Goetzel, 2009)
Arguments Over Prevention

Public health prevention focuses on disease prevention by targeting

- Individuals’ behaviors
  - Diet, exercise, and risk behaviors like smoking and un-safe sexual activities
- The environment in which people live
  - Pollution, safety, and opportunities for physical activity
- Social determinants of health
  - Education, housing, and income
Multiple Meanings of Prevention

Clinical prevention includes:

1. Interventions that are reactive to disease and illness, such as screenings and disease management
2. Expensive personnel, such as physicians, dieticians, and professional personal trainers
3. Prescription medications
4. Expensive technology
5. One-person-at-a-time interventions
Multiple Meanings of Prevention

Public health prevention includes:

1. Proactively avoiding disease and illness
2. Employing less expensive personnel, such as health educators, social workers, and layperson community health workers
3. Education programming
4. Policy change
5. Communities-at-a-time interventions
Outcomes: Clinical Prevention

- Fewer than 20% of clinical preventative interventions reduce costs.

- Although cost-effectiveness varies across different types of medication, “no drug reduces medical spending.” (Russell, 2009)
Outcomes: Public Health Prevention

“An investment of $10 per person per year in proven community-based programs to

- increase physical activity
- improve nutrition
- prevent smoking and other tobacco use

could save the country more than $16 billion annually within 5 years.”

(Trust For America’s Health, 2008)
Outcomes: Public Health Prevention

“This is a return of $5.60 for every $1 invested.”

<table>
<thead>
<tr>
<th>NATIONAL RETURN ON INVESTMENT OF $10 PER PERSON (Net Savings)</th>
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<tbody>
<tr>
<td></td>
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<tr>
<td>1-2 Years</td>
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<tr>
<td>Total Care Cost Savings</td>
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<tr>
<td>$5,784,081,647</td>
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<tr>
<td>Costs of Interventions</td>
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<tr>
<td>U.S. Net Savings</td>
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<td>$2,847,701,647</td>
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<td>ROI</td>
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<td>0.96:1</td>
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* In 2004 dollars, net savings

(Source: Trust for America’s Health, 2008)
Outcomes: Public Health Prevention

Annual Program Savings by 2020 Assuming Reductions in Growth Rates of Chronic Disease Prevalence

(Amounts in Billions)

<table>
<thead>
<tr>
<th>Slow Disease Growth By:</th>
<th>Savings to Medicare</th>
<th>Savings to Medicaid</th>
<th>Total Savings</th>
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<tbody>
<tr>
<td>5%</td>
<td>$1.20</td>
<td>$0.50</td>
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<td>25%</td>
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<tr>
<td>50%</td>
<td>$34.20</td>
<td>$14.70</td>
<td>$48.90</td>
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</table>

(Source: Waidmann et al, 2011)
Outcomes: Integrating Public Health and Clinical Prevention

Deaths Prevented And Change In Health Care Costs Plus Program Spending, Three Intervention Scenarios, At Year 10 And Year 25.

- Change in deaths prevented
- Change in costs

Results through year 10

- Universal coverage
- Better preventive and chronic care
- Better behavioral and environmental conditions

Results through year 25

- Universal coverage
- Better preventive and chronic care
- Better behavioral and environmental conditions

- Change in cumulative discounted costs ($billions)

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Outcomes: Integrating Public Health and Clinical Prevention

Annual Costs (Health Care And Program Spending), Three Layered Intervention Scenarios, Year 0 To Year 25.

- Coverage
- Coverage plus care
- Coverage plus care plus protection
Public Health Policy

- Prevention and Public Health Fund, PL 111-148; sec. 4002
  - Will “provide for expanded and sustained national investment in prevention and public health programs to improve health and help restrain the rate of growth in private and public sector health care costs.” (PL 111-148; sec. 4002)
  - Allocated PPHF $15 billion over first ten years, but President Obama signed subsequent legislation that cut the fund by $5 billion over ten years.
Stakeholders

Prevention and Public Health Fund, PL 111-148; sec. 4002

• Against:
  • House and Senate Republicans
  • Citizens’ Council for Health Freedom
Stakeholders: “High Ground”

Prevention and Public Health Fund, PL 111-148; sec. 4002

• For:
  • House and Senate Democrats
  • Secretary Sebelius, HHS
  • American Association of Colleges of Osteopathic Medicine
  • RWJF Center for Health Policy
  • Academy of Nutrition and Dietetics
  • American Academy of Pediatrics
  • American Academy of Family Physicians
  • American College of Preventive Medicine
Recommendation

• Evidence-based, population-level public health interventions reduce healthcare costs while improving the wellbeing of individuals and communities.

• Integrating public health prevention and clinical prevention, “each with its own methodologies and bodies of knowledge, is likely to be most effective in responding to complex, multifactorial diseases.” (Gostin et al, 2011)
Recommendation

- Support the integrity and sustainability of the Prevention and Public Health Fund.
- Support the National Prevention, Health Promotion, and Public Health Council’s (National Prevention Council) “Health in All Policies” approach to incorporating a public health prevention paradigm into all relevant federal policies.