A New Era of Public Health: Partners and Perspectives

Janet Collins, Ph.D.
Associate Director for Program,
Centers for Disease Control and Prevention

Society of Behavioral Medicine Annual Meeting
April 13, 2012
The Cost of a Long Life

Year 2000

Sources: [http://ucatlas.ucsc.edu/spend.php](http://ucatlas.ucsc.edu/spend.php); [www.cdc.gov/mmwr/preview/mmwrhtml/mm4850bx.htm](http://www.cdc.gov/mmwr/preview/mmwrhtml/mm4850bx.htm)
Jeff Koplan, MD – Emory School of Public Health
The Cost Conundrum
What a Texas town can teach us about health care

By Atul Gawande, MD
June 1, 2009
### HIGHER Quality Is Lower Cost

Two middle-aged men with the same problem …

<table>
<thead>
<tr>
<th>Traditional</th>
<th>Coordinated</th>
</tr>
</thead>
<tbody>
<tr>
<td>- 3 initial physicians, 3 locations</td>
<td>- 2 initial physicians, 1 location</td>
</tr>
<tr>
<td>- 15 tests in 3 days</td>
<td>- 3 tests in 1 day</td>
</tr>
<tr>
<td>- ER, then hospital for 8 days</td>
<td>- Hospital for 4 days</td>
</tr>
<tr>
<td>- Operation</td>
<td>- Operation</td>
</tr>
<tr>
<td>- 9 secondary physicians</td>
<td>- 2 secondary physicians</td>
</tr>
<tr>
<td>- Rehab for 7 days</td>
<td>- Home</td>
</tr>
</tbody>
</table>

$90,000

$19,000
A Relationship Between Dollars Spent and Quality Achieved

Overall Quality Ranking in U.S.

Annual Medicare spending per beneficiary ($)

Source: JAMA 2003; authors Katherine Baicker, Amitabh Chandra
Physician-Owned Practices Are Disappearing

% of all U.S. physician practices owned by MD

- 2000: 75%
- 2005: 65%
- 2010: 45%
- 2015+: 20%

“Health care is vital to all of us some of the time, but public health is vital to all of us all of the time.”

-C. Everett-Koop
Decline in Deaths from Cardiovascular Disease in Relation to Important Public Health Interventions

- 1964: First Surgeon General's Report on smoking
- 1970: Public Health Cigarette Smoking Act
- 1976: First Great American Smokeout
- 1977: Federal cigarette tax doubled
- 1982: Surgeon General's Report on nutrition and health
- 1988: Physicians' Health Study on aspirin
- 1990: National Labeling and Education Act requires food labels
- 1991: Smoke-free law passed in California
- 2003: Joint National Committee's Seventh Report on hypertension
- 2006: NIH promotes dietary approach to stop hypertension (DASH)
- 2007: Philadelphia passes ban on trans fat
- 2009: Restaurant calorie-count law passed in New York
- 2009: National Cancer Institute campaigns for increased fruit and vegetable intake
Key Winnable Battles for Public Health

- Tobacco
- Healthcare-Associated Infections
- Teen Pregnancy
- Nutrition, Physical Activity, Obesity and Food Safety
- Motor Vehicle Injuries
- HIV
Million Hearts: Prevent 1M heart attacks and strokes over next 5 years

Engage public and private sectors to:
- Reduce number of people who need treatment
- Improve quality of treatment for those who need it

http://millionhearts.hhs.gov/
Rx Drug Abuse

Drug overdose death rates in the US have more than tripled since 1990.\textsuperscript{5}

IOM Childhood Obesity Prevention Strategies

Ecological, Population Level
- Educational
  - Mobilization
  - Advocacy
  - Network & partnership building
  - Educational programs
  - Obesity prevention campaigns
- Policy
  - Smart Growth planning policies
  - School policies
  - Food industry policies
  - Restaurants reduce portion size
- Environment
  - Increased opportunities for PA
  - Reduced environmental barriers
  - Increased availability of fruits & veggies
  - Increase access to healthy foods and areas for PA

Individual Level
- Mediating Factors
  - Increased awareness, decision skills
  - Readiness to change
  - Enhanced parental peer social support
  - Enhanced social networks & social capital
- Behavioral Factors
  - Reduced sedentary behavior
  - Increased % of parents who moderate meal portions
  - Increased PA
  - Dietary behavior modified

Outcomes
- Health Effects
  - Reduced prevalence of obesity
  - Reduced childhood morbidity related to obesity
IOM Childhood Obesity Prevention Strategies

- Ecological, Population Level
  - Educational
    - Advocacy
    - Network & partnership building
    - Educational programs
    - Obesity prevention campaigns
  - Policy
    - School policies
    - Food industry policies
    - Restaurants: reduce portion size
  - Environment
    - Reduced environmental barriers
    - Increased availability of fruits & veggies
    - Increase access to healthy foods and areas for PA
  - Mediating Factors
    - Readiness to change
  - Behavioral Factors
    - Increased % of parents who moderate meal portions
    - Enhanced parental peer social support
    - Enhanced social networks & social capital
    - Dietary behavior modified

- Individual Level
- Outcomes
  - Health Effects
    - Reduced prevalence of obesity
    - Reduced childhood morbidity related to obesity

Comprehensive Programs Are Most Effective
IOM Childhood Obesity Prevention Strategies

Ecological, Population Level

- Educational
  - Advocacy
  - Network & partnership building
  - Educational programs
  - Obesity prevention campaigns
- Policy
  - Food industry policies
  - Restaurants reduce portion size
- Environment
  - Increased availability of fruits & veggies
  - Increase access to healthy foods and areas for PA
- Mediating Factors
  - Increased parental peer social support
  - Enhanced social networks & social capital
- Behavioral Factors
  - Increased PA
  - Dietary behavior modified

Individual Level

Outcomes

- Health Effects
  - Reduced prevalence of obesity
  - Reduced childhood morbidity related to obesity

Comprehensive Programs Are Most Effective
But Only if Money Isn’t an Issue
The Comprehensive Conundrum

- Media
- Policy
- Environment
- Education
- Access
- Availability
- Social Support
- Price

Persons Reached

Persons We Need to Reach
HIV Prevention: Selected vs. Comprehensive Programs

Early use of ART reduced the risk of HIV transmission by 96%
HIV Prevention: Selected vs. Comprehensive Programs

Early use of ART reduced the risk of HIV transmission by 96% “in complement with other prevention methods”
Program Strategies for Maximum Value

- Evidence of Effectiveness – using proven strategies when available
- Size of Impact – using strategies that move the needle farthest/fastest
- Cost/Scalability – using affordable strategies with broad population reach
- Sustainability – using strategies with the smallest ongoing resource requirements
Why Policy?

To achieve the biggest benefit... for the greatest number of people... for the longest period of time... at an acceptable cost.
Number of Adult Cigarette Smokers and Smoke-free Policy

<table>
<thead>
<tr>
<th>Level of Policy Implementation</th>
<th>Smoking is allowed in the Workplace, Restaurants and Bars</th>
<th>Smoking is allowed in either the Workplace, Restaurants and Bars</th>
<th>Smoking is not allowed</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Lowest Percentages of Adult Smokers</th>
<th>Highest Percentages of Adult Smokers</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>State</strong></td>
<td><strong>% of adult smokers (2009)</strong></td>
</tr>
<tr>
<td>-------------------------------------</td>
<td>--------------------------------------</td>
</tr>
<tr>
<td>Utah</td>
<td>9.8</td>
</tr>
<tr>
<td>California</td>
<td>12.9</td>
</tr>
<tr>
<td>Washington</td>
<td>14.9</td>
</tr>
<tr>
<td>Massachusetts</td>
<td>15.0</td>
</tr>
<tr>
<td>Rhode Island</td>
<td>15.1</td>
</tr>
<tr>
<td>Maryland</td>
<td>15.2</td>
</tr>
<tr>
<td>District of Columbia</td>
<td>15.3</td>
</tr>
<tr>
<td>Connecticut</td>
<td>15.4</td>
</tr>
<tr>
<td>Hawaii</td>
<td>15.4</td>
</tr>
<tr>
<td>New Jersey</td>
<td>15.8</td>
</tr>
<tr>
<td>New Hampshire</td>
<td>15.8</td>
</tr>
<tr>
<td>Arizona</td>
<td>16.1</td>
</tr>
<tr>
<td>Idaho</td>
<td>16.3</td>
</tr>
</tbody>
</table>
Perspective on the New Era of Public Health

- Researchers and practitioners document costs of programs they run and interventions they test

- Funders and journal editors require cost data in what they fund and publish

- Comprehensive programs are not the default choice
Societal Health Determinants

“Conditions in the social, physical, and economic environment in which people are born, live, work, and age. They consist of policies, programs, and institutions and other aspects of the social structure, including the government and private sectors, as well as community factors.”

The Community Context: Place Matters

As presented by Jonathan E. Fielding, MD, MPH, MBA, Director and Health Officer, Los Angeles County Dept of Public Health
A brisk walk in the park keeps Money B in shape between dog shows. His owner, Columbus resident Cathy Stumbo, gets up early to give her 3-year-old Doberman his regular workout. They typically jog 3-5 miles at Berliner Park.
Vision

Working together to improve the health and quality of life for individuals, families, and communities by moving the nation from a focus on sickness and disease to one based on prevention and wellness.
# National Prevention Council

<table>
<thead>
<tr>
<th>Bureau of Indian Affairs</th>
<th>Department of Labor</th>
</tr>
</thead>
<tbody>
<tr>
<td>Corporation for National and Community Service</td>
<td>Department of Transportation</td>
</tr>
<tr>
<td>Department of Agriculture</td>
<td>Department of Veterans Affairs</td>
</tr>
<tr>
<td>Department of Defense</td>
<td>Environmental Protection Agency</td>
</tr>
<tr>
<td>Department of Education</td>
<td>Federal Trade Commission</td>
</tr>
<tr>
<td>Department of Health and Human Services</td>
<td>Office of Management and Budget</td>
</tr>
<tr>
<td>Department of Homeland Security</td>
<td>Office of National Drug Control Policy</td>
</tr>
<tr>
<td>Department of Housing and Urban Development</td>
<td>White House Domestic Policy Council</td>
</tr>
<tr>
<td>Department of Justice</td>
<td></td>
</tr>
</tbody>
</table>
Examples of Sector-based Policy

- Transportation – mass transit and complete streets initiatives
- Agriculture – subsidies for more nutritious foods and away from less nutritious foods
- Tax – policies to reduce percentage in poverty
- Environment – policies to improve air quality (e.g., higher CAFE standards, cleaner energy sources)
Healthy and Safe Community Environments

- Clean air and water
- Affordable and secure housing
- Sustainable and economically vital neighborhoods
- Make healthy choices easy and affordable
Health Impact Assessment (HIA)

A systematic process to determine the potential effects of a proposed policy, plan, program, or project on the health of a population and the distribution of those effects within the population. HIA provides recommendations on monitoring and managing those effects.

National Research Council, Improving Health in the United States: The Role of Health Impact Assessment, 2011. As presented by Jonathan E. Fielding, MD, MPH, MBA, Director and Health Officer, Los Angeles County Department of Public Health
Getting the Most Value for Our Public Health Dollar

Attack with two complementary strategies:

- Narrow in on the most effective, least costly public health interventions

- Expand out to engage non-health sectors to play a positive role in health