How Will We Know If Health Care Reform Is Working?
One Public Health Perspective

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Before we begin. . . . from a population health perspective, we need to understand
Before we begin... from a population health perspective, we need to understand:

What Is Health?
Health is a

• State of physical, mental, and social well-being (World Health Organization)

• Resource for everyday life (Ottawa Charter)
And Public Health

Is responsible for creating conditions for people to be healthy
Core Functions of Public Health

• Assessment
• Policy Development
• Assurance
Goal: Long Healthy Lives for All We Need to Measure It!

- Length of Life (Life Expectancy)
- Quality of Life (Health-related quality of life, healthy days)
Or

We can combine them into a single metric

Health-adjusted life expectancy or HALE

We need a measure of HALE in every community for benchmarking and measuring progress

HALE provides a single common metric to compare the health of populations
What Produces Health?

Health Outcomes:
- Mortality (length of life) 50%
- Morbidity (quality of life) 50%

Health Factors:
- Health behaviors (30%)
- Clinical care (20%)
- Social and economic factors (40%)
- Physical environment (10%)

Health Factors:
- Tobacco use
- Diet & exercise
- Alcohol use
- Sexual activity
- Access to care
- Quality of care
- Education
- Employment
- Income
- Family & social support
- Community safety
- Environmental quality
- Built environment

Policies and Programs
The Affordable Care Act

- Focuses strongly on population health through
  - Emphasis on prevention
  - Creation of the National Prevention Council
  - Creation of a prevention trust fund
  - Eliminating copayments for clinical preventive services
  - Strengthening Community Benefit and creating Accountable Care Organizations
Community (Health) Needs Assessments

• Are required for
  – Not-for-profit hospitals
  – Public health agency accreditation

• Need a core set of data at the local level
Total Population Health vs Health of a Subpopulation: A System Within a System Approach

Employee Population
Plan Membership
Clinical Care System
Educational System

Total Population (geopolitical area)

Jacobson DM, Teutsch S. An Environmental Scan of Integrated Approaches for Defining and Measuring Total Population Health by the Clinical Care System, the Government Public Health System and Stakeholder Organizations (NQF)
Recommendations from the National Quality Forum Report on Measuring Total Population Health

• Use existing national indicator sets where possible
• Use existing state- and local-sponsored population health data to supplement national data
• Measures should support the attainment of health equity
• Clinical and PH organizations should work with key partners and stakeholders
• To ensure successful reporting, use the terminology 1) total population health surveys and; 2) subpopulation data

## Examples of Indicators for Tobacco

<table>
<thead>
<tr>
<th>Health Outcomes</th>
<th>Indicator/Measure</th>
<th>Leadership for Health Improvement Activities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mortality</td>
<td>Lung Cancer Mortality</td>
<td>Shared</td>
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<tr>
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<td>Cardiovascular Disease Mortality</td>
<td>Shared</td>
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<td></td>
<td>COPD Mortality</td>
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<tr>
<td>Morbidity</td>
<td>Self-rated health status (among smokers)</td>
<td>Shared</td>
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<tr>
<td>Health Factors</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Health Behaviors</td>
<td>Adolescent and adult Smoking Rates</td>
<td>Shared</td>
</tr>
<tr>
<td>Clinical Care</td>
<td>Adolescent and adult Smoking Rates – subpopulation of clinical care system</td>
<td>Clinical Care System</td>
</tr>
<tr>
<td></td>
<td>Hospitalizations for cardiovascular disease</td>
<td></td>
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<td></td>
<td>Timeliness of diagnosis and treatment for lung cancer</td>
<td></td>
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<tr>
<td>Social and Economic Factors</td>
<td>Health Literacy – population-based</td>
<td>Government Public Health System</td>
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<tr>
<td></td>
<td>High school graduation rates</td>
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<td></td>
<td>Access to care and insurance coverage</td>
<td>Government Public Health System</td>
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<tr>
<td>Physical Environment</td>
<td>Exposure to Second-hand Smoke</td>
<td>Government Public Health System</td>
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<td>Ambient Air Quality Standards</td>
<td></td>
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<tr>
<td>Policies and Programs (health improvement activities)</td>
<td>Counseling to prevent initiation</td>
<td>Clinical Care System</td>
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<tr>
<td></td>
<td>Cessation counseling and treatment</td>
<td></td>
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<td></td>
<td>Referral to tobacco hotline</td>
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<tr>
<td></td>
<td>Health Literacy – one-on-one</td>
<td></td>
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<tr>
<td></td>
<td>Clean Air Laws</td>
<td></td>
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<tr>
<td></td>
<td>Tobacco Taxes</td>
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<tr>
<td></td>
<td>Establish and maintain tobacco hotline</td>
<td>Clinical Care System</td>
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<td></td>
<td>Ensure provision of tobacco cessation coverage by all health plans</td>
<td>Government Public Health System</td>
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Challenges

• Defining populations and communities
• Adjusting for case mix in the clinical care and governmental PH systems
• Integrating and harmonizing data collection
• Creating standardized criteria for prioritizing and implementing high-value disease prevention and health promotion activities
• Utilizing methodologies that capture the dynamic complexity of concurrent and overlapping health improvement activities
• Accounting for emerging Internet-based data sources
Scenario from the IOM Report on Public Health Strategies:
Public Health Delivery of Clinical Care Under ACA

• Delivery of clinical services likely to drop substantially but

• Public Health retains responsibility for control of many conditions, e.g., STDs, vaccine-preventable illness
Implications of PH Delivering Less Clinical Care

• More quality assurance

This will require

• Access to close to real-time clinical data
• Skills to analyze and facilitate use of the results
• Perhaps new Health Officer authorities
Public Health and Clinical QA
Scope

• The necessary:
  – Communicable disease control

• The apparent
  – Clinical preventive services
  – Consumer protective services

• The possible
  – Quality of care more generally, e.g., preventable hospitalizations, HbA1c, BMI
Challenges for Public Health

• Lack of financial support for meaningful use in public health
• Staffing
• Standing with the clinical care system