The *Community Health Improvement Matrix*: an effective tool for implementation planning

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National Association of County and City Health Officials

Ed Gerardo
Bon Secours Health System 3/5/15
Learning Objectives

• Identify implementation activities within Healthy People 2020’s Social Determinants of Health construct.
• Apply a hospital – local health department case example to their settings.
• Use the *Community Health Improvement Matrix* in implementation planning.
The problem

• Health department CHAs and hospital CHNAs point to challenging health problems: obesity, substance abuse, mental health, maternal and child health.

• To make progress, the context in which these problems are occurring must be addressed.

• This is difficult to do.
  • It requires strong community partners.
  • The evidence base is still being developed.

• Conceptualizing the challenge is a first step.
Vehicle miles driven and obesity rates

In addition to obesity, research also suggests that commuting is associated with an increased risk of developing high blood pressure, high cholesterol, depression, anxiety, and social isolation, all of which can impair the quality and length of life.
WASHINGTON, D.C. -- The longer that Americans are unemployed, the more likely they are to report signs of poor psychological well-being. About one in five Americans who have been unemployed for a year or more say they currently have or are being treated for depression — almost double the rate among those who have been unemployed for five weeks or less.

Do you currently have, or are you currently being treated for, depression?

Among unemployed, likelihood of being depressed rises steadily over time

- Currently have/being treated for depression

Gallup-Healthways Well-Being Index, 2013

GALLUP®

These findings are based on surveys with 356,599 Americans, including 18,322 unemployed adults, conducted in 2013 as part of the Gallup-Healthways Well-Being Index.
Education level and substance use

**Figure 1. Past Month Substance Use among 12th Grade Aged Youths, by Dropout Status: 2002 to 2010**

- Cigarettes: 56.8% (Dropouts), 22.4% (In School)
- Alcohol: 41.6% (Dropouts), 35.3% (In School)
- Binge Alcohol: 32.3% (Dropouts), 23.8% (In School)
- Any Illicit Drug: 31.4% (Dropouts), 18.2% (In School)
- Marijuana: 27.3% (Dropouts), 15.3% (In School)
- Nonmedical Use of Prescription-Type Drugs: 9.5% (Dropouts), 5.1% (In School)

* Difference between 12th grade students and 12th grade aged youths who had dropped out of school is significant at the .05 level.

Breastfeeding and education level

<table>
<thead>
<tr>
<th>Education Level</th>
<th>% Breastfeeding 2009</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt; High school</td>
<td>39.7</td>
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<tr>
<td>High school</td>
<td>37.0</td>
</tr>
<tr>
<td>Some college</td>
<td>44.1</td>
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<tr>
<td>Associate’s degree</td>
<td>46.8</td>
</tr>
<tr>
<td>4-year degree</td>
<td>61.8</td>
</tr>
<tr>
<td>Advanced degree</td>
<td>68.1</td>
</tr>
</tbody>
</table>

Source: National Immunization Survey
Healthy habitats for humans

The social determinants of health are the conditions in which people are born, grow, live, work and age. These circumstances are shaped by the distribution of money, power and resources at global, national and local levels.
The Local Public Health System Assessment (LPHSA) focuses on all of the organizations and entities that contribute to the public's health. The LPHSA answers the questions: "What are the components, activities, competencies, and capacities of our local public health system?" and "How are the Essential Public Health Services being provided to our community?"

Above is a web representing the entities that make up the Local Public Health System in Nashville.

The LPHSA uses a quality improvement tool developed by the Centers for Disease Control & Prevention (CDC), the National Association of City & County Health Officials (NACCHO) et al. called the National Public Health Performance Standards Program (NPHPSP) Local Public Health System Performance Assessment Instrument. Yes that is a mouthful!
Healthy People 2020 model

https://www.healthypeople.gov/
Community Health Improvement Matrix

Objective:

PREVENTION LEVEL

- Tertiary
- Secondary
- Primary
- Contextual

INTERVENTION LEVEL

- Individual
- Interpersonal
- Organizational
- Community
- Public Policy
Objective: Increase Breastfeeding

**Community Health Improvement Matrix**

**PREVENTION LEVEL**

- Tertiary
  - ACEs & Moms

- Secondary
  - Visiting Nurses
  - BF Pumps Available

- Primary
  - Education
  - La Leche League
  - BF Room at Work

- Contextual

**INTERVENTION LEVEL**

- Individual
- Interpersonal
- Organizational
- Community
- Public Policy

- Local Values
- Supporting Laws
- Living Wages
Story from the Field: Bon Secours Health System
The Mission of Bon Secours Health System is to bring compassion to health care and to be good help to those in need, especially the poor and dying.

As a System of caregivers, we commit ourselves to help bring people and communities to health and wholeness as part of the healing ministry of Jesus Christ and the Catholic Church.
Our mission is constant...

The Mission of Bon Secours Health System is to bring compassion to health care and to be Good Help to Those in Need®, especially those who are poor and dying.

As a system of caregivers, we commit ourselves to help bring people and communities to health and wholeness as part of the healing ministry of Jesus Christ and the Catholic Church.

Our vision

Inspired by the healing ministry of Jesus Christ and the Charism of Bon Secours...

As a prophetic Catholic health ministry we will partner with our communities to create a more humane world, build health and social justice for all, and provide exceptional value for those we serve.

Strategic goals

To faithfully respond to God’s gift of compassion, healing, and liberation we commit to:

- Bring our communities to wholeness
- Ensure our care is extraordinary
- Transform our health delivery
- Express our Catholic identity
- Liberate our people’s potential

Building healthy communities

respect | compassion | justice | integrity | quality | innovation | stewardship | growth
Population Health

Community Outreach

- Patient Centered
- Health Conditions
- Primary and Facility Care
- Pharmacology
- Health Education
- Health Screenings
- Program Oriented

Social Determinates Changes

Improving Health Behaviors

Clinical Care

Healthy Community

- Community Centered
- Social Conditions
- Education, Housing, Economic Development, Transportation
- Multi-organizational
Integrated Emphasis

Social Determinants Programs

Clinical and Public Health Initiatives

Community Organizing & Leadership
<table>
<thead>
<tr>
<th>Condition</th>
<th>BS Hampton Roads</th>
<th>BS Richmond</th>
<th>BS St. Francis</th>
<th>BS Kentucky</th>
<th>BS Charity</th>
<th>BS Baltimore</th>
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<tbody>
<tr>
<td>Behavioral/Mental Health</td>
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<td>Alcohol &amp; Substance Abuse</td>
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<td>Chronic Disease Prev/Mgmt (Adult &amp; Child Obesity)</td>
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<td>Chronic Disease Prev/Mgmt (Other, e.g. Diabetes)</td>
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<td>Heart Disease &amp; Stroke</td>
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<tr>
<td>Maternal &amp; Child Health</td>
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<tr>
<td>Cancer Detection &amp; Screening</td>
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<td>Oral and Dental Health</td>
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<td>Asthma &amp; Respiratory Disease</td>
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<td>Alzheimer's Disease</td>
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<td>Healthy &amp; Safe Environments</td>
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<td>Transportation</td>
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<td>Condition</td>
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<td>Improve Housing Market</td>
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<td>Job Creation</td>
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<td>Aging Services</td>
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# Implementation Plan Priorities

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Implementation Plans - Collaborative Actions w/Health Depts

**Bon Secours Hampton Roads**
- ✓ Nutritional Guidelines for Health Facility Cafeterias

**Bon Secours Charity**
- ✓ “Complete Streets” Initiative

**Bon Secours Richmond**
- ✓ Health Clinic in Housing Community

**Bon Secours Kentucky**
- ✓ Healthy Choices Coalition – Farmers’ Markets, Walking Trails
- ✓ Boyd County – Appalachian Partnership for Positive Living and Eating (APPLE), Firm Fitness
Objective: Reduce Obesity

Community Health Improvement Matrix

- Tertiary
  - Bariatric Surgery

- Secondary
  - Firm Fitness
  - Education
  - Cooking Classes
  - Nutrition Guides
  - Farmers Market

- Primary
  - Walking Trails
  - “Complete Streets”

- Contextual

PREVENTION LEVEL

INTERVENTION LEVEL

Individual, Interpersonal, Organizational, Community, Public Policy
Population Health

Community Outreach

- Patient Centered
- Health Conditions
- Primary and Facility Care
- Pharmacology
- Health Education
- Health Screenings
- Program Oriented

Clinical Care

Improving Health Behaviors

Social Determinates Changes

Healthy Community

- Community Centered
- Social Conditions
- Education, Housing, Economic Development, Transportation
- Multi-organizational
Healthy Community Outcomes

- Economic opportunities
- Affordable housing and safe, walkable streets
- Vibrant expressions of faith and community
- Improved health status
- Successful education and training
- Availability for recreation and cultural arts
Health Resources

- Economic opportunities
- Affordable and safe housing
- Improved health status
- Vibrant faith expression
- Vibrant recreation & arts

Improved health status

- Wellness/Life Coach
- Dietician
- Community Health Worker
Job Creation

Economic opportunities
Affordable and safe housing
Improved health status
Vibrant faith expression
Vibrant recreation & arts

Economic Oppts

Bakeries/Markets
Supplier to “Anchor”
Artisan Shops
Housing in Baltimore

Over 640 units of affordable housing for seniors and low income residents
BS Baltimore’s Community Works

Family Resource Center
✓ GED preparation
✓ Child care services, Maryland Family Network
✓ Parenting skills, formerly incarcerated men

Financial Assistance and Planning
Job training, readiness
✓ Computer skills
✓ Clean and Green landscaping services
✓ Pipeline for entry level hospital services
BS Baltimore’s Implementation Plan

Healthy People
- Expansion of Primary Care and Prevention Services
- Health Enterprise Zone Collaborative Initiative

Healthy Economy
- Workforce Development Program
- Expansion of Affordable Housing
- Advocacy for Improved Public Transit System

Healthy Environment
- Elimination of Pesticides and Toxic Chemicals (internal)
- Expansion of Community Green Spaces
Community Health Improvement Matrix

BS Baltimore Implementation Plan

PREVENTION LEVEL

Tertiary
Secondary
Primary
Contextual

INTERVENTION LEVEL

Individual
Interpersonal
Organizational
Community
Public Policy

Public Transit
Green Spaces
Green Facility
Health Enterprise Zone
Job Training
Screening
CHWs

Affordable Housing

Public
Policy

Transit Health Enterprise Zone

Enterprise

Zone

Facility

Spaces

Facility

Spaces

Affordable Housing

Public
Policy

Transit

Affordable Housing

BS Baltimore Implementation Plan

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BS Baltimore Implementation Plan

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Affordable Housing

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Policy

Transit

Affordable Housing
Activity: Using the Community Health Improvement Matrix

Prevention Levels: *Prevention levels refer to the range of activities that can reduce health risks.*

<table>
<thead>
<tr>
<th>Level</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Contextual:</td>
<td>Prevent the emergence of predisposing social and environmental conditions that can lead to causation of disease</td>
</tr>
<tr>
<td>Primary:</td>
<td>Reduce susceptibility or exposure to health threats</td>
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<tr>
<td>Secondary:</td>
<td>Detect and treat disease in early stages</td>
</tr>
<tr>
<td>Tertiary:</td>
<td>Alleviate the effects of disease and injury</td>
</tr>
</tbody>
</table>

Intervention Levels: *Intervention levels are built on a socioecological model that recognizes different factors that affect health.*

<table>
<thead>
<tr>
<th>Level</th>
<th>Description</th>
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</thead>
<tbody>
<tr>
<td>Individual:</td>
<td>Characteristics of the individual such as knowledge, attitudes, behavior, self-concept, skills, etc. Includes the individual’s developmental history</td>
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<tr>
<td>Interpersonal:</td>
<td>Formal and informal social network and social support systems, including family, work group, and friendship networks</td>
</tr>
<tr>
<td>Organizational:</td>
<td>Social institutions with organizational characteristics, and formal (and informal) rules and regulations for operation</td>
</tr>
<tr>
<td>Community:</td>
<td>Relationships among organizations, institutions, and informal networks within defined boundaries</td>
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<tr>
<td>Public Policy:</td>
<td>Local, state, and national laws and policies</td>
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</table>
Thank you! Questions?

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Reena Chudgar, NACCHO
rchudgar@naccho.org

Ed Gerardo, Bon Secours Health System
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