Presentation to the Healthy City Collaborative and Partner Council

Nikhil Prachand
Chicago Department of Public Health
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Community Health Assessment and Improvement Plans

• One of the Ten Essential Public Health Services

• Required component:
  • Public Health Accreditation
  • Illinois Local Public Health Department Certification

• Collaborating with hospitals on assessment and planning efforts:
  • Healthy Chicago Hospital Collaborative
  • Health Impact Collaborative of Cook County
Mobilizing for Action through Planning and Partnerships (MAPP)

**MAPP Process**

1. **PARTNERSHIP DEVELOPMENT** - Ongoing
2. **VISIONING** - Sept 2014
3. **4 MAPP ASSESSMENTS** - Sept 2014-Feb 2015
   - Community Themes & Strengths
   - Forces of Change
   - Local Public Health System
   - Community Health Status
4. **IDENTIFY STRATEGIC ISSUES** - April 2015
5. **FORMULATE GOALS, OBJECTIVES & STRATEGIES** - May-Dec 2015
6. **Launch Healthy Chicago 2.0** - March 2016
   - Plan
7. **ACTION** - 2016-2019
   - Evaluate
   - Implement

*Developed by National Association of County and City Health Officers (NACCHO) and the Centers for Disease Control and Prevention (CDC)*
Partnership for Healthy Chicago
Healthy Chicago 2.0
Vision

“A city with strong communities and collaborative stakeholders, where all residents enjoy equitable access to resources, opportunities and environments that maximize their health and well-being.”

Focus on Health Equity

Health equity is achieved when every person has the opportunity to attain his or her full health potential.
Plan Development

12 sessions to identify problems/potential solutions

8 sessions to set priorities

Action Teams
130 organizations
200 people
Identified 10 Action Areas

- 30 goals

- 82 measurable objectives

- 230 strategies
  - Many cross-cutting
  - Involve multi-sector partnerships
## Action Areas

### Health Conditions
- Behavioral Health*
- Child & Adolescent Health*
- Chronic Disease*
- Infectious Disease
- Violence

### Root Causes
- Access to Health Care & Human Services
- Education
- Community Development *(built environment, housing, economic development)*

### Essential Supports
- Data & Research
- Partnerships & Community Engagement

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*Healthy Illinois 2021 Priorities*
## Action Areas

### Health Conditions

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- Chronic Disease*
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### Root Causes

- Access to Health Care & Human Services
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### Essential Supports

- Data & Research
- Partnerships & Community Engagement
Root Causes of Health

Neighborhood & Built Environment

Health Care Access

Social and Community Context

Education

Economic Stability
Root Causes (SDOH)

- Racial Discrimination
- Social Cohesion
- Perception of Neighborhood Safety
- Perception of School Safety
- Mistreatment by Criminal Justice
- Housing Quality and Availability
- Early Childhood Education
- School Attendance
- Economic Hardship
- Child Opportunity
Focusing on Economic Hardship by Neighborhood

• Dependency
  • Percentage of the population under 18 or over 64 years of age

• Crowded housing
  • Percentage of occupied housing with more than one person per room

• Poverty
  • Percentage of persons living below the federal poverty level

• Per capita income

• Unemployment
  • Percentage of persons in the labor force over the age of 16 years that are unemployed

• No high school graduation
  • Percentage of person over the age of 25 years without a high school diploma

Source: American Community Survey, 5-year estimates, 2009-2013
Exploring the Relationship between Preventable Hospitalizations and Economic Hardship

$R^2 = 0.4711$
Health Behaviors and Hardship

No Activity in Past Month: 18.3%
Meets Physical Activity Guideline: 24.4%
5+ Servings Fruits & Vegetables: 29.2%
Traffic Fatality Rate* by Hardship

*Traffic fatality rate per 100,000 population

Does not include 19 traffic fatalities without Chicago Hardship data available

Source: U.S. Census 2010, 2014 5-year American Community Survey

Preliminary data
Economic Hardship and Health Outcomes

- **High Hardship strongly correlates to:**
  - Inadequate prenatal care
  - Teen births
  - Self-reported poor or poor health status
  - Smoking
  - Low fruit and vegetable consumption
  - No physical activity
  - Adult obesity
  - Poor mental health
  - Chlamydia incidence
  - Hospitalizations related to heart disease, diabetes and COPD
  - Cervical cancer incidence and mortality
  - Premature mortality
  - Homicides
  - Drug-induced mortality
  - Infant mortality

- **Low hardship correlates to:**
  - Breast cancer incidence
  - Suicide
Focusing on Child Opportunity by Neighborhood

Educational
- Adult educational attainment
- Student (school) poverty rate
- Reading proficiency rate
- Math proficiency rate
- Early childhood education neighborhood participation patterns
- High school graduation rate
- Proximity to high-quality early childhood education centers
- Proximity to early childhood education centers of any type

Health and Environmental
- Retail healthy food index
- Proximity to toxic waste release sites
- Volume of nearby toxic release
- Proximity to parks and open spaces
- Housing vacancy rates
- Proximity to health care facilities

Economic
- Neighborhood foreclosure rate
- Poverty rate
- Unemployment rate
- Public assistance rate
- Proximity to employment

Source: Kirwan Institute and Brandies University, 2014
Elevated Blood Lead Level and Child Opportunity

Communities with less opportunity have higher percentages of children with elevated blood lead levels.
Obesity among CPS kindergarteners, sixth and ninth graders is greater in children with more educational opportunity.
TEEN BIRTH RATE

Births per 1,000 Females Aged 15-19

Chicago: 35.5
Very Low: 57.3
Low: 42.7
Moderate: 31.6
High: 20.4
Very High: 7.0

Child Opportunity Index

Source: IDPH, Division of Vital Records, Birth Certificate Files, 2000-2013; American Community Survey, 5-year estimates, 2009-2013
Child Opportunity and Health Outcomes

• Less child opportunity in a neighborhood is strongly correlated with:
  • Shootings
  • Elevated blood lead levels
  • Obesity in children
  • Life expectancy at birth
  • Teen births

Source: Kirwan Institute and Brandies University, 2014
Setting Targets
82 Measurable Objectives
ACCESS: NO HEALTH INSURANCE

Source: American Community Survey, 5-year estimates 2010-2014
COMMUNITY DEVELOPMENT: LEAD POISONING

- Chicago: 3.4%
- Very Low: 5.7%
- Low: 4.4%
- Moderate: 2.7%
- High: 1.8%
- Very High: 1.0%

Percent children <3 with elevated blood lead levels (>6mcg/dL)

Child Opportunity Index

HC 2.0 Target for Very Low Child Opportunity Communities

Source: Lead Poisoning & Prevention Program, Chicago Department of Public Health, 2014
CHILD & ADOLESCENT HEALTH: TEEN BIRTH RATE

Births per 1,000 Females Aged 15-19

- Chicago: 35.5
- Very Low: 57.3
- Low: 42.7
- Moderate: 31.6
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Child Opportunity Index

- HC 2.0 Target for Very Low Child Opportunity Communities: 51.6

Source: IDPH, Division of Vital Records, Birth Certificate Files, 2000-2013; American Community Survey, 5-year estimates, 2009-2013
CHRONIC DISEASE: HPV VACCINATION

Percent Female Adolescents Aged 13-17 who Received 3 or More Doses of HPV Vaccine

Source: National Immunization Survey-Teen, 2009-2014
VIOLENCE: GUN-RELATED HOMICIDES


Age-adjusted Firearm-related Homicide Rate per 100,000

- Chicago: 10.8
- Hispanic males: 10.5
- Non-Hispanic Asian/Pacific Islander males: 0
- Non-Hispanic black males: 63.1
- Non-Hispanic white males: 1.0

-- HC 2.0 Target for African American Males

50.5

Source: Healthy Chicago
Implementation Healthy Chicago 2.0

• Launch in April 2016
• CDPH and community co-chairs: develop work plans and identify implementation teams
• Implementation teams will work to identify strategy owners and develop action plans
• CDPH will monitor implementation and progress
• Publish quarterly Healthy Chicago 2.0 updates
# Action Areas

*Healthy Illinois 2021 Priorities*

## Health Conditions
- Behavioral Health*
- Child & Adolescent Health*
- Chronic Disease*
- Infectious Disease
- Violence

## Root Causes
- Access to Health Care & Human Services
- Education
- Community Development (*built environment, housing, economic development*)

## Essential Supports
- Data & Research
- Partnerships & Community Engagement
Utilizing and Maximizing Data and Research

Goal 1: Assure equitable access to quality data

Goal 2: Public health research will be coordinated and disseminated widely
Goal 1: Assure equitable access to quality data

- Launch citywide public health data partnership
- Establish functional data sharing mechanisms
- Improve data literacy of policymakers and other stakeholders
Goal 1
Objectives

✓ Launch citywide public health data partnership
✓ Establish functional data sharing mechanisms
✓ Improve data literacy of policymakers
Current Data Partners

- **City of Chicago**
  - Public Health
    - Healthy Chicago Survey
    - Communicable Disease
    - Environmental Permitting & Inspection
    - Food Safety
    - Immunization
    - Lead
    - HIV/STI
    - TB
  - Chicago Fire Department
  - Chicago Housing Authority
  - Chicago Park District
  - Chicago Police Department
  - Chicago Public Library
  - Chicago Public Schools
  - Chicago Transit Authority
  - 311
  - Buildings
  - Cultural Affairs
  - Business Affairs
  - Emergency and Management Communication
- **Greater Chicago Food Depository**
- **National Association for the Education of Young Children**
- **Infobase**

- **Cook County**
  - Department of Public Health
  - *Medical Examiner’s Office*
  - Assessor’s Office
  - Chicago Board of Election Commissioners

- **State of Illinois**
  - Department of Human Services
    - WIC/Cornerstone
  - Healthcare and Family Services
    - Early Intervention
  - Department of Public Health
    - Behavioral Risk Factor Surveillance
    - Illinois Cancer Registry
    - Vital Records
    - Hospital/ED Discharge Data
  - Illinois EPA
  - Alcohol and Substance Abuse
  - State Board of Education

- **United States Government**
  - Department of Labor
  - Department of Agriculture (USDA)
  - Department of Education
  - Census Bureau
  - Centers for Disease Control & Prevention
  - Housing & Urban Development (HUD)
  - Oceanic and Atmospheric Administration (NOAA)
  - Postal Service (USPS)
# Data Gaps/Opportunities

<table>
<thead>
<tr>
<th>Hospital/Clinic Systems/EHR</th>
<th>Legislative/Revenue</th>
</tr>
</thead>
<tbody>
<tr>
<td>Academic institutions/Clinical Research</td>
<td>Social Service</td>
</tr>
<tr>
<td>Criminal Justice/Legal Sector</td>
<td>Policy/Advocacy Groups</td>
</tr>
<tr>
<td>Public/Private Insurance</td>
<td>Philanthropies/Charities</td>
</tr>
<tr>
<td>Business Development</td>
<td>Private Education</td>
</tr>
<tr>
<td>Built Environment/Engineering</td>
<td>Faith-Based</td>
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<tr>
<td>Social Media/Internet/IOT</td>
<td>Recreational/Entertainment</td>
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<td>Technology/Communication</td>
<td>Financial/Private Capital Sector</td>
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<td></td>
<td>Real Estate</td>
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</table>
Goal 2: Public health research will be coordinated and disseminated widely

✓ Establish PH research principles of engagement
✓ Adopt a citywide research agenda
✓ Establish a CDPH Research Liaison
Goal 2
Objectives

✓ Establish PH research principles of engagement
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## Involving the Community

<table>
<thead>
<tr>
<th></th>
<th>Traditional</th>
<th>Community-Engaged</th>
<th>CBPR</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Research Objective</strong></td>
<td>Based on epidemiologic data &amp; funding priorities</td>
<td>Community input in identifying locally relevant issues</td>
<td>Full participation of community in identifying issues of greatest importance</td>
</tr>
<tr>
<td><strong>Study Design</strong></td>
<td>Design based entirely on scientific rigor and feasibility</td>
<td>Researchers work with community to ensure study design is culturally acceptable</td>
<td>Community intimately involved with study design</td>
</tr>
<tr>
<td><strong>Recruitment &amp; Retention</strong></td>
<td>Based on scientific issues &amp; “best guesses” regarding how to best reach community members</td>
<td>Researchers consult with community representatives on recruitment &amp; retention strategies</td>
<td>Community representatives provide guidance on recruitment &amp; retention strategies and aid in recruitment</td>
</tr>
<tr>
<td><strong>Instrument Design</strong></td>
<td>Instruments adopted/adapted from other studies. Tested chiefly w/psychometric analytic methods.</td>
<td>Instruments adopted from other studies &amp; tested/adapted to fit local populations</td>
<td>Instruments developed with community input and tested in similar populations</td>
</tr>
<tr>
<td><strong>Data Collection</strong></td>
<td>Conducted by academic researchers or individuals w/no connection to the community</td>
<td>Community members involved in some aspects of data collection</td>
<td>Conducted by members of the community, to the extent possible based on available skill sets. Focus on capacity building.</td>
</tr>
<tr>
<td><strong>Analysis &amp; Interpretation</strong></td>
<td>Academic researchers own the data, conduct analysis &amp; interpret the findings</td>
<td>Academic researchers share results of analysis with community members for comments &amp; interpretation</td>
<td>Data is shared; community members &amp; academic researchers work together to interpret results</td>
</tr>
<tr>
<td><strong>Dissemination</strong></td>
<td>Results published in peer-reviewed academic</td>
<td>Results disseminated in community venues as well</td>
<td>Community members assist academic researchers to</td>
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Goal 2
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Creating a Citywide Research Agenda

- Restorative practices in schools
- Positive peer relationships in schools
- Bullying/violence prevention interventions
- Identifying gaps in access to care
- New behavioral health interventions (CBT, Harm Reduction)
- New practice initiatives to reduce substance use in pregnant women
- New practice based initiatives to increase partner involvement
- Evidence-based home visiting MCH programs
- New screening tools to identify early development issues
- Childhood obesity reduction interventions
- Initiatives to promote PrEP initiation and adherence
- Evidence-based after-school programming
- Evidence-based family-focused interventions for positive parenting
- Restorative practices to improve police-community relations
- Evaluation of impact of expanding trauma-informed program
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Chicago Consortium for Community Engagement
Connecting and leveraging research resources for a healthier Chicago
When it’s better for everyone, it’s better for everyone

- Eleanor Roosevelt