Population health: A significant component of health care

Health Policy Institute of Ohio
January 2017
Today’s presentation

• Health Value Dashboard
• What is “population health”?  
• Population health planning
• State health assessment and improvement plan
• Implications for behavioral health
Vision

To influence the improvement of health and well-being for all Ohioans.

Mission

To provide the independent and nonpartisan analysis needed to create evidence-informed state health policy.
HPIO core funders

- Interact for Health
- Mt. Sinai Health Care Foundation
- The George Gund Foundation
- Saint Luke’s Foundation of Cleveland
- The Cleveland Foundation
- HealthPath Foundation of Ohio
- Sisters of Charity Foundation of Canton
- Sisters of Charity Foundation of Cleveland
- Cardinal Health Foundation
- United Way of Greater Cincinnati
- Mercy Health
- CareSource Foundation
- SC Ministry Foundation
- United Way of Central Ohio
Tactics

Written and online products

Education

Facilitation

Technical assistance
Health

Healthcare
Modifiable factors that influence health

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

*Source: County Health Rankings and Roadmaps population health model*

Access to quality health care is necessary, but not sufficient, for good health.

Health spending

- 95% Clinical care
- 5% Prevention and public health

*Source: Analysis of national health expenditures*

But we spend most of our healthcare dollars on clinical “sick care” instead of prevention.
Population health outcomes

Health value

Healthcare costs
Pathway to improved health value

Systems and environments that affect health

- Healthcare system
  - Preventive services
  - Hospital utilization
  - Timeliness, effectiveness and quality of care
  - Behavioral health
  - Equity

- Public health and prevention
  - Public health workforce and accreditation
  - Public health funding
  - Communicable disease control

- Access
  - General access, coverage and affordability
  - Behavioral health
  - Oral and vision care
  - Workforce
  - Equity

- Social and economic environment
  - Education
  - Employment and poverty
  - Family and social support
  - Trauma, toxic stress and violence
  - Income inequality
  - Equity

- Physical environment
  - Air, water and toxic substances
  - Food access and food insecurity
  - Housing, built environment and access to physical activity
  - Equity

Equitable, effective and efficient systems

Optimal environments

Improved population health
- Health behaviors
- Health equity
- Health status
- Mortality

IMPROVED HEALTH VALUE

Sustainable healthcare spending
- Public sector
- Private sector
- Consumers

World Health Organization definition of health: Health is a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity.
How does Ohio do?
The state of health in Ohio

Ohio ranks 47th on health value
Highest- and lowest-value states

Highest value states
States in the top quartile for both population health and healthcare costs

Lowest value states
States in the bottom quartile for both population health and healthcare costs

Hawaii
Utah
Colorado
Idaho

Ohio
Indiana
West Virginia

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Snapshot of health challenges and strengths
“How does your organization plan to use the 2014 Health Value Dashboard?”
(n=38 hard copy order form respondents)
2017 Health Value Dashboard

**Progress**

Significant change from baseline year to most recent year

**Equity**

Health disparities by:
- Race/ethnicity
- Education level
- Income level
- Disability status
# Behavioral health metrics in the 2014 Health Value Dashboard

## Population health

<table>
<thead>
<tr>
<th>Metric</th>
<th>Description</th>
<th>Rank</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adult binge drinking</td>
<td>Percent of adults report binge drinking in past month</td>
<td>36</td>
</tr>
<tr>
<td>Adult smoking</td>
<td>Percent of adults who are current smokers</td>
<td>44</td>
</tr>
<tr>
<td>Youth all-tobacco use</td>
<td>Percent of high school students who used tobacco in past 30 days</td>
<td>NR*</td>
</tr>
<tr>
<td>Suicide deaths</td>
<td>Suicide deaths per 100,000 population</td>
<td>18</td>
</tr>
<tr>
<td>Drug overdose deaths</td>
<td>Drug overdose deaths per 100,000 population</td>
<td>35</td>
</tr>
<tr>
<td>Poor mental health</td>
<td>Average number of days in past 30 where mental health was poor</td>
<td>36</td>
</tr>
<tr>
<td>Adult depression</td>
<td>Percent of adults who have ever been told they have depression</td>
<td>NEW</td>
</tr>
</tbody>
</table>

## Access

<table>
<thead>
<tr>
<th>Metric</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unmet need for mental health treatment</td>
<td>Percent of adults ages 18 and older with past year mental illness who reported perceived need for treatment/counseling was not received</td>
</tr>
<tr>
<td>Unmet need for illicit drug use treatment</td>
<td>Percent of individuals ages 12 and older needing but not receiving treatment for illicit drug use in the past year</td>
</tr>
<tr>
<td>Underserved, psychiatrists</td>
<td>Percent of need not met by current supply of psychiatrists in designated mental health care professional shortage areas.</td>
</tr>
</tbody>
</table>

* Ohio data only (rank not available)
Behavioral health metrics in the 2014 Health Value Dashboard

**Healthcare system**

<table>
<thead>
<tr>
<th>Metric</th>
<th>Description</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mental illness hospitalization follow-up</td>
<td>Percent of Medicaid enrollees ages 6 and older who received follow-up after hospitalization for mental illness within 30 days of discharge</td>
<td>NR*</td>
</tr>
<tr>
<td>Substance use disorder treatment retention</td>
<td>Percent of individuals ages 12 and older with an intake assessment who received one outpatient index services within a week and two additional outpatient index services within 30 days of intake</td>
<td>NR*</td>
</tr>
</tbody>
</table>

**Public health and prevention**

<table>
<thead>
<tr>
<th>Metric</th>
<th>Description</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sales of opioid pain relievers</td>
<td>Kilograms of opioid pain relievers sold per 10,000 population</td>
<td>31</td>
</tr>
<tr>
<td>Youth marijuana use</td>
<td>Percent of youth ages 12-17 who initiated marijuana use within the past 24 months.</td>
<td>NEW</td>
</tr>
</tbody>
</table>

**Social and economic environment**

<table>
<thead>
<tr>
<th>Metric</th>
<th>Description</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Social-emotional support</td>
<td>Percent of adults without social-emotional support</td>
<td>27</td>
</tr>
<tr>
<td>Social capital and cohesion</td>
<td>Composite measure that includes connections with neighbors, supportive neighborhoods, voter turnout, and volunteerism</td>
<td>29</td>
</tr>
</tbody>
</table>

* Ohio data only (rank not available)
Ohio’s performance on the 2017 Health Value Dashboard

• Got better
• Stayed the same
• Got worse
Purpose
The emergence of "population health" as a significant component of healthcare reform reflects widespread recognition that factors outside of the healthcare system, such as the social, economic, and physical environment, must be addressed in order to improve the health of the overall population. While there is growing agreement on the importance of population health, there is a lack of consensus on a single, actionable definition of the term. Healthcare system and public health stakeholders tend to define population health differently, which has hampered efforts to work across sectors to improve population health.

In 2014, with support from the National Network of Public Health Institutes (NNPHI) through the Robert Wood Johnson Foundation-funded project, the Health Policy Institute of Ohio convened a group of healthcare and public health stakeholders to develop a consensus definition of population health for Ohio. The purpose of this work is to operationalize the concept of population health in a way that is useful to Ohio’s health leaders in designing population health improvement strategies, such as state-level health improvement plans and local improvement plans led by nonprofit hospitals, local health departments, United Ways, and others.

This brief describes the consensus understanding of population health that resulted from discussions among members of the HPIO Population Health Definition Workgroup.

Population health in the Triple Aim and State Innovation Models (SIM)
Population health is one of the components of the Institute for Healthcare Improvement’s (IHI) widely used Triple Aim framework (see Figure 1). Following the Triple Aim, the US Centers for Medicare and Medicaid Services (CMS) include population health as one of the four focus areas for the Innovation Center State Innovation Models (SIM) initiative, which provides funding for states to design and test new payment and healthcare delivery models. Ohio was one of 15 states to receive a design grant in 2013 for Round One of the SIM. In July 2014, the Ohio Governor’s Office of Health Transformation (OHT) applied for SIM Round Two funding to accelerate health system transformation in Ohio. SIM Round Two requires grantee states to develop a statewide Population Health Improvement Plan. Funding decisions for SIM Round Two are expected by the end of 2014.

Figure 1. Triple Aim and State Innovation Model (SIM) focus areas

<table>
<thead>
<tr>
<th>Triple Aim</th>
<th>SIM focus areas</th>
</tr>
</thead>
<tbody>
<tr>
<td>Improve population health</td>
<td>Transformation of care</td>
</tr>
<tr>
<td>Improve healthcare outcomes</td>
<td>Improve population health</td>
</tr>
<tr>
<td>Improve population health</td>
<td>Improve population health</td>
</tr>
</tbody>
</table>

"It is no longer sufficient to expect that reforms in the medical care delivery system (for example, changes in payment, access, and quality) alone will improve public health." — Institute of Medicine (IOM)
Cincinnati Asthma Admissions and Neighborhood Asthma Hotspots

Source: Cincinnati Children’s Hospital Medical Center, 2014
Legal Aid Housing Cases Mapped Against Neighborhood Asthma Hotspots

Asthma admissions 9/1/10-8/31/11
- Blue: Legal Aid housing cases
- Black: City of Cincinnati

Admission rate per 1000
- Green: 0.00 - 0.78
- Light green: 0.79 - 3.40
- Yellow: 3.41 - 5.76
- Orange: 5.77 - 10.99
- Red: 11.00 - 27.24
- White: Census tract

Source: Cincinnati Children’s Hospital Medical Center, 2014
“It is no longer sufficient to expect that reforms in the medical care delivery system (for example, changes in payment, access and quality) alone will improve the public’s health.”

— Institute of Medicine
Triple Aim and State Innovation Model (SIM) focus areas

**Triple Aim**
- Population health
- Experience of care
- Per capita cost

**SIM focus areas**
- Improve population health
- Transform healthcare delivery
- Expand value based payment model
Primary Care Payers: Public & Private

Public Health Policy

Payers: Public & Private Health Systems Hospitals

Primary Care

Population Health

Patients

Source: Paul Wallace, Institute of Medicine, presentation at 2013 Ohio Public Health Combined Conference
# HPIO Population Health Definition Workgroup

<table>
<thead>
<tr>
<th>Governor’s Office of Health Transformation</th>
<th>Ohio Department of Health</th>
<th>Ohio Department of Medicaid</th>
<th>Local health departments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Philanthropy</td>
<td>Greater Cincinnati Health Collaborative</td>
<td>Ohio Council of Behavioral Health Providers</td>
<td>Children’s Hospitals</td>
</tr>
<tr>
<td>Ohio Hospital Association</td>
<td>Ohio Academy of Family Physicians</td>
<td>CareSource (Managed care plan)</td>
<td>Ohio Public Employees Retirement System</td>
</tr>
<tr>
<td>Safe Routes to School Partnership</td>
<td>Ohio Commission on Minority Health</td>
<td>Aetna Better Health of Ohio</td>
<td>Ohio Osteopathic Association</td>
</tr>
</tbody>
</table>
Definition

Population health is the **distribution of health outcomes** across a **geographically-defined group**

which result from the **interaction between**

**individual biology and behavior**;

the **social, familial, cultural, economic and physical environments** that support or hinder wellbeing;

and the **effectiveness of the public health and healthcare systems**.
Key characteristics of population health strategies

- Beyond the patient population
- Beyond medical care
- Measuring outcomes
- Closing gaps (improvement for all groups)
- Shared accountability
Beyond the patient population

Population health strategies focus on improving health of the overall population or subpopulations.

**Total population of a geographic area**
Example: State of Ohio or Allen County

**Subpopulation**
Example: African-American women or young children (ages 0-5)

**Enrollees in an insurance pool**
Example: Members of a Medicaid managed care plan

**Patients within the clinical care system**
Example: Patients receiving care from a specific hospital or public health clinic

Clinical care system focuses on individual health improvement for patients who use their provider-based services.

**Source:** Adapted from “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.” Public Health Institute and County of Los Angeles Public Health, 2012.
Beyond medical care

Focus on:
- Treatment of specific diseases and conditions
- Downstream symptoms of health problems
- Medical and biological determinants of sickness
- Patients
- Healthcare providers, purchasers and payers

Focus on:
- Wellness, prevention and health promotion
- Upstream causes of health problems
- Social determinants of health and community conditions
- All people
- Partnerships between health and sectors such as education, transportation and housing
Measuring outcomes

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Ohio’s rank</th>
<th>Data value</th>
<th>Trend</th>
<th>Best state</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>baseline</td>
<td>most recent</td>
<td></td>
</tr>
<tr>
<td><strong>Overall health and wellbeing</strong></td>
<td>39</td>
<td>1.5</td>
<td>1.6</td>
<td>-</td>
</tr>
<tr>
<td>Limited activity due to health problems</td>
<td>34</td>
<td>1.5</td>
<td>1.6</td>
<td>-</td>
</tr>
<tr>
<td>Overall health status</td>
<td>35</td>
<td>18%</td>
<td>18.3%</td>
<td>-</td>
</tr>
<tr>
<td>Life expectancy</td>
<td>37</td>
<td>77.5</td>
<td>77.8</td>
<td>+</td>
</tr>
<tr>
<td>Premature death</td>
<td>38</td>
<td>NA</td>
<td>7.294</td>
<td>NA</td>
</tr>
</tbody>
</table>
Reducing disparities and promoting health equity

**GREATER COLUMBUS INFANT MORTALITY REPORT CARD**

In 2011...

- 18,045 babies were born in Franklin County
- 174 of these babies died before their first birthday, 22 were sleep-related
- 2,462 were born prematurely at less than 37-weeks gestation

**Tracking Our Progress...**

<table>
<thead>
<tr>
<th>Franklin County Indicator</th>
<th>Baseline</th>
<th>2020 Goal**</th>
<th>Reporting Year</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Outcomes and Key Drivers</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Infant Mortality</strong>&lt;sup&gt;1&lt;/sup&gt; (# infant deaths/1,000 live births)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>9.6</td>
<td>6</td>
<td></td>
</tr>
<tr>
<td>White</td>
<td>7.5</td>
<td>5.8</td>
<td></td>
</tr>
<tr>
<td>Black</td>
<td>17.1</td>
<td>6.6</td>
<td></td>
</tr>
<tr>
<td>Hispanic</td>
<td>5.3</td>
<td>4.9</td>
<td></td>
</tr>
<tr>
<td><strong>Sleep-related infant deaths</strong>&lt;sup&gt;2&lt;/sup&gt; (# infant deaths/1,000 live births)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>1.3</td>
<td>0.94</td>
<td></td>
</tr>
<tr>
<td>White</td>
<td>1.1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Black</td>
<td>2.2</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Prematurity</strong>&lt;sup&gt;3&lt;/sup&gt; (% babies born &lt;37-weeks gestation)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>13.6%</td>
<td>9.6%</td>
<td></td>
</tr>
<tr>
<td>White</td>
<td>11.8%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Black</td>
<td>17%</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Low birthweight</strong> (% of babies born &lt;2,500 grams)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>9.3%</td>
<td>7.8%</td>
<td></td>
</tr>
<tr>
<td>White</td>
<td>7.7%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Black</td>
<td>12.8%</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Achieving our 2020 goals means that 65 more babies in our community will celebrate their first birthdays.

To be reported annually. Will include notation if progress is “on track” or not.
Shared accountability
beyond medical care

Emerging policy opportunities to advance prevention and improve health value in Ohio
What is prevention?

Keeping people healthy and safe

Prevention addresses health problems before they occur, rather than after people have shown signs of disease, injury, or disability. In order to be effective in reaching large numbers of people before they become sick, prevention strategies are implemented in a wide variety of settings, including clinics, schools, worksites, and neighborhoods. Prevention strategies focus on both individual and community wellness. Prevention programs often help individuals engage in healthier behaviors, such as driving safely or not smoking. Many also focus on improving the overall community so that healthy behaviors are expected and supported, and people have clean water to drink, clean air to breathe and safe places to live, work, and play.

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**Figure 1. Levels of prevention**

<table>
<thead>
<tr>
<th>Level</th>
<th>Audience</th>
<th>Examples</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Primary prevention</strong> occurs when there is no health problem present and aims to prevent a disease, injury or other health problem from occurring in the first place.</td>
<td>Total population in a geographic area and/or healthy people</td>
<td>Providing healthy foods and physical activity opportunities for all children in school in order to reduce diabetes rates, Safe sleep campaigns to prevent infant mortality, Immunizations, School-based drug and alcohol prevention programs designed to increase student knowledge and avoidance skills, Home visits for expectant parents to promote healthy pregnancy and positive parenting skills</td>
</tr>
<tr>
<td><strong>Secondary prevention</strong> occurs at the first signs of a health problem and aims to detect health problems at an early stage and/or to slow or halt the progress of an existing disease or injury.</td>
<td>Individuals with early-stage disease but no symptoms and/or those with high-risk factors</td>
<td>Fitness and nutrition education programs for pre-diabetic teenagers, Breast and colorectal screenings to identify cancer in early stages, Hearing and vision screenings for young children, Suicide and depression risk screenings, A Matter of Balance classes for seniors identified as high-risk for falls due to poor balance or strength, Early intervention programs for children who have missed developmental milestones</td>
</tr>
<tr>
<td><strong>Tertiary prevention</strong> occurs after a health problem has developed and aims to reduce the negative impact of a disease, injury or other health problem and to prevent or delay complications and subsequent harm.</td>
<td>Patients</td>
<td>Diabetes self-management classes to prevent complications from diabetes, Programs to help parents identify and remove asthma triggers in the home, Ear tube surgery to prevent recurrent ear infections, Provision of naloxone to individuals with opioid addiction to prevent overdose deaths</td>
</tr>
</tbody>
</table>
Improving population health planning in Ohio

Prepared by the Health Policy Institute of Ohio for the Ohio Governor’s Office of Health Transformation. Ohio Department of Health and Ohio Department of Medicaid

Jan. 11, 2016
Primary objectives

• Provide recommendations to strengthen the population health planning and implementation infrastructure
• Align population health priority areas, measures, objectives and evidence-based strategies with the design and implementation of the PCMH model
Improve the health of Ohioans by deploying a strategic set of evidence-based, upstream population health activities at the scale needed to measurably improve population health outcomes.
Public Health  Health Care
## Population health infrastructure in Ohio

**Governor’s Office of Health Transformation**

**Ohio Department of Health**

**Other state agencies**
- ODM
- OMHAS
- ODA
- DODD
- ODJFS
- ODVS, etc.

### Community-level public and private partners

<table>
<thead>
<tr>
<th>Hospitals and other healthcare providers</th>
<th>Local health departments and other public health organizations</th>
<th>ADAMH boards and mental health and addiction service providers</th>
<th>Health insurance plans</th>
</tr>
</thead>
<tbody>
<tr>
<td>Community-based organizations and social services</td>
<td>Local government</td>
<td>Law enforcement/criminal justice</td>
<td>Transportation and regional planning</td>
</tr>
<tr>
<td>Education and child care</td>
<td>Businesses and employers</td>
<td>Philanthropy/United Ways</td>
<td>Advocacy groups and community action agencies</td>
</tr>
<tr>
<td>Community residents and healthcare consumer groups</td>
<td>Family and Children First Councils</td>
<td>Job and Family Services</td>
<td></td>
</tr>
<tr>
<td>At-risk populations</td>
<td>Agriculture, environmental protection and natural resources</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Continuum of collaboration between local health departments and hospitals

Source: HPIO and the Ohio Research Association for Public Health Improvement analysis of local health department and hospital community health planning documents, March 2015. For more information, see HPIO’s publication "Making the most of community health planning in Ohio: The role of hospitals and local health departments."
State health assessment (SHA)
State health improvement plan (SHIP)

Local health departments
Community Health Assessment (CHA) and Community Health Improvement Plan (CHIP)

Hospitals
Community Health Needs Assessment (CHNA) and Implementation Strategy (IS)
Recommendations

- SHA and SHIP improvements
- State and local alignment
  - Guidance for priorities, measures and strategies
- LHD and hospital alignment
  - Guidance on collaboration
  - Requirement for LHDs and hospitals: 3-year timeline alignment
- Funding
  - Seek additional funding for LHDs
  - Guidance on community benefit
- Transparency and accessibility
  - Requirement for LHDs and hospitals: submit assessments and plans
  - Requirement for hospitals: submit schedule H
<table>
<thead>
<tr>
<th></th>
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<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>State and local public health accreditation</td>
<td>Public Health Accreditation Board (PHAB) accredits Ohio Department of Health (2015)</td>
<td>Local health departments (LHDs) required to apply for PHAB accreditation</td>
<td>LHDs required to be PHAB accredited</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Starting July 1, 2017: Tax-exempt hospital Schedule H information annual reporting</td>
<td></td>
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</tr>
</tbody>
</table>

- LHDs and hospitals submit existing assessments and plans (July 1, 2017)
- Hospitals submit schedule H forms (July 1, 2017 and no later than 30 days after IRS filing thereafter)
- State sets up repository of assessments, plans and schedule H information
- Guidance from ODH on how to align LHD and hospital plans and resources with the SHIP
- Aligned 3-year cycle begins (Oct. 1, 2020)
Making the most of community health planning in Ohio
The role of hospitals and local health departments

Introduction
Community health planning is a collaborative process that engages a variety of partners to identify and implement strategies that address a community’s most pressing health needs. The overarching aim of community health planning is to improve the health and wellbeing of community residents.

Recent federal and state policy changes require nonprofit hospitals and local health departments (LHDs) to engage in community health planning activities. Hospitals and LHDs are required to collaborate with organizations within their community to prioritize their community’s health needs, and develop plans and implement strategies to address those needs. Under this new policy landscape, hospitals and LHDs can play a critical role in aligning and leveraging community health planning activities across the state to improve the overall health of Ohioans.

Key community health planning terms

Community health needs assessment (CHNA): an assessment conducted by a hospital every three years to identify and prioritize its community’s health needs and identify potential measures and resources available to address its community’s prioritized health needs.

Implementation strategy (IS): a plan identifying how a hospital will address the significant health needs identified in the CHNA.

Community health assessment (CHA): a collaborative assessment conducted at least every five years by a LHD to describe the health of the population, identify areas for health improvement, contributing factors that impact health outcomes and community assets and resources that can be mobilized to improve population health.

Community Health Improvement Plan (CHIP): a collaborative plan conducted by a LHD that builds upon the CHA to set priorities, direct the use of resources, and develop and implement projects, programs, and policies to improve the health of the population of the jurisdiction that the LHD serves.
## Summary of community health planning requirements for hospitals and local health departments (LHDs)

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Internal Revenue Service (Hospitals)</th>
<th>Public Health Accreditation Board (LHDs)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Assessment</strong></td>
<td>Community health needs assessment (CHNA) must:                                                                                           • Identify significant health needs of the community,  • Prioritize those health needs, and  • Identify resources potentially available to address those health needs.</td>
<td>Community health assessment (CHA) must:                                                                                           • Describe the health and demographics of the population,  • Identify areas for health improvement,  • Identify contributing factors that impact health outcomes, and  • Identify community assets and resources that can be mobilized to improve population health.</td>
</tr>
<tr>
<td><strong>Definition of “community”</strong></td>
<td>In defining community, hospitals may take into account the geographic area served by the hospital, target population(s) served, and principal functions of the hospital facility (for example, a focus on a particular specialty area or targeted disease).</td>
<td>The community is defined as the jurisdiction served by the LHD.</td>
</tr>
<tr>
<td><strong>Timeline</strong></td>
<td>CHNAs and implementation strategies (3a) must be completed every three years, effective for taxable years beginning after March 23, 2012. Hospitals must provide information annually to the IRS on how they are addressing the significant health needs identified in their CHNAs.</td>
<td>CHAs and community health improvement plans (CHIPs) must be completed at least every five years.</td>
</tr>
<tr>
<td><strong>Collaboration and partnership</strong></td>
<td>CHNAs must include input from persons who represent the broad interests of the community including:  • Those with special knowledge or expertise in public health and  • Members of underserved, low-income, and minority populations. CHNAs may be conducted in collaboration with other organizations including governmental departments (such as state or local health departments) and nonprofit organizations.</td>
<td>Partnerships with other organizations outside of the health department are required in conducting the CHA and CHIP and documentation of the following must be provided:  • Partners outside of the LHD that represent community populations and a variety of state and local community sectors,  • Partner representation from two or more populations that are at a higher health risk or have poorer health outcomes than other populations, and  • Regular meetings or communications with partners.</td>
</tr>
<tr>
<td><strong>Solicitation of input and feedback</strong></td>
<td>Hospitals must solicit and take into account written comments received on their most recently conducted CHNA and implementation strategy.</td>
<td>Preliminary findings of the CHA and CHIP must be distributed to the community at large and community input must be sought.</td>
</tr>
</tbody>
</table>
Hospital and LHD community health planning: **key similarities**

**Assessment and plan**
- Identify and prioritize health needs of the community
- Identify community resources available to address community’s health needs
- Identify strategies to address community’s health needs

**Process**
- Engage community members in health planning process
- Solicit feedback from a broad range of stakeholders
- Discuss health disparities and vulnerable populations
- Include social determinants of health
- Communicate findings to the public
Health Policy Brief

Glide path framework for connecting primary care with upstream population health activities

Stronger connections to improve health

In response to stakeholder discussions on the challenges of addressing the social determinants of health in a primary care setting (see text on page 2), the Health Policy Initiative of Ohio developed a glide path framework outlining the activities and partners needed to:

- Connect primary care with community-based resources.
- Create links between primary care and the broader environmental conditions that impact health.
- Implement evidence-based interventions and policies that support the glide path.

Framework description

The glide path framework (see figure 1) provides a structure for aligning health care providers and delivery system transformation activities with state and community-level population health planning efforts. The glide path also serves as a tool to prompt discussions around specific strategies and financing mechanisms that build and sustain structural connections between primary care and community-based prevention and social service organizations.

Policy recommendations

Executive branch

1. Develop a strong state health improvement plan (SHIP) that addresses all levels of the glide path framework.
2. Provide adequate resources and staffing for backbone organizations housed within the Ohio Department of Health such as the Ohio Chronic Disease Collaborative and allow grant or contract funds to be used for backbone infrastructure activities that address the social determinants of health (glide path levels C, D, and E).
3. Explore single-instrument grant awards to local health departments that allow flexibility in addressing needs across the entire glide path.
4. Continue to identify and incorporate outcome measures and pay-performance (P4P) models in Medicaid managed care contracts that incentivize providers and managed care plans to more effectively address behavior change and basic needs (glide path levels A and B).
5. Explore strategies that allow Medicaid to cover community-based programs that support behavior change and address basic needs (glide path levels A and B).
6. Develop payment models (e.g., accountable care models) that encourage and incentivize Medicaid managed care plans to work with local health departments, social service agencies, and other community-based organizations to address basic needs and behavior change and community conditions (glide path levels A, B, C, D, and E).

Legislative branch

1. Routinely assess the potential impact of proposed legislation and policy decisions in sectors such as transportation, education, and criminal justice (glide path level E) on population health outcomes, health equity, and healthcare costs (similar to the Common Sense Initiative, referred to as a "Health Equity in All Policies" approach).
2. Enact legislation to implement recommendations in the "Improving Population Health Planning in Ohio" report to improve population health planning in Ohio, including new requirements for local health departments and incent or mandate community-level age-friendly health planning, in addressing all glide path levels.
3. Explore the establishment of a wellness trust fund for Ohio—a sustainable source of public and/or private funds that could be used to address the social, economic, and environmental factors that impact health and the built environment (glide path levels C, D, and E).
4. Bring together local health departments, hospitals, and other partners with a legislative district to identify, implement, and evaluate strategies to improve upstream conditions that impact health (glide path levels A-E).
“Glide path” framework to connect primary care with upstream population health activities

Source: Developed by HPIO as part of a population health planning project commissioned by the Governor’s Office of Health Transformation, Ohio Department of Health and Ohio Department of Medicaid.
Diabetes prevention example

Optimal health
- Healthy community environments: Access to healthy food and places to be active
- Healthy behaviors: Physical activity, healthy eating, no tobacco use
- Healthy weight

Prediabetes
Blood glucose or A1C levels higher than normal but not high enough to be classified as diabetes.
Risk factors include: overweight or obesity, lack of physical activity, tobacco use, high blood pressure, toxic stress and family history.

Diabetes
No cure, but disease management can help to control blood glucose levels and mitigate further complications.

Downstream impacts include:
- Heart disease
- Stroke
- Blindness
- Loss of toes, feet or legs
- Kidney failure

Primary prevention strategies to help children and adults stay healthy, such as enhanced physical education and healthy food incentives for SNAP participants.

Secondary prevention strategies to stop or delay transition to type 2 diabetes, such as Diabetes Prevention Programs (education and follow-up support from a trained lifestyle coach for healthy eating, physical activity and other behavior changes).

Disease management strategies, such as Patient Centered Medical Homes, case management and chronic care model (proactive, team-based care).

$h440 \text{ Per-Person cost of Diabetes Prevention Program}

$h7,900 \text{ Per-Person cost of diabetes-related medical care}

$h67,000+ \text{ Per-Person cost of dialysis}
Implications for behavioral health
Vision
Ohio is a model of health and economic vitality.

Mission
Improve the health of Ohioans by implementing a strategic set of evidence-based population health activities at the scale needed to measurably improve population health outcomes and achieve health equity.
What is the state health assessment (SHA)?

A comprehensive and actionable picture of health and wellbeing in Ohio

- Informs identification of priorities for the State Health Improvement Plan
- Provides template for state agencies and local partners (uniform set of categories and metrics)
**SHA sources of information**

**Data profiles**
- Existing data from several different sources, including surveys, birth and death records, administrative data and claims data
- Data on all age groups (life-course perspective)
- Disparities for selected metrics by race, ethnicity, income or education level, sex, age, geography or disability status
- U.S. comparisons, notable changes over time and Ohio performance on Healthy People 2020 targets

**SHA regional forums**
- Five locations around the state
- 372 in-person participants and 32 online survey participants
- Identified priorities, strengths, challenges and trends

**Review of local health department and hospital assessments/plans**
- 211 local health department and hospital community health assessment/plan documents
- Covered 94 percent of Ohio counties
  - Summary of local-level health priorities

**Key informant interviews**
- Interviews with 37 representatives of 29 community-based organizations
- Explored contributing causes of health inequities and disparities
- Special focus on groups at-risk for poor health outcomes and those underrepresented in the SHA/SHIP process

Comprehensive and actionable picture of health and wellbeing in Ohio
SHA key finding #1

Many opportunities exist to improve health outcomes, especially in terms of:
• Mental health and addiction
• Chronic disease
• Maternal and infant health
• Improving health behaviors
Mental health and addiction

The unintentional injury death rate, which includes drug overdoses, increased 30 percent from 2009 to 2014 and emerged as Ohio’s second highest cause of premature death.

**Source:** Ohio Department of Health, Bureau of Vital Statistics
SHA key finding #1

Mental health and addiction
Opiate-related drug overdose deaths stand out as an immediate threat to the wellbeing of Ohioans

Figure 2.e.9. Opiate admissions. Percentage of clients in treatment with a primary diagnosis of opiate abuse or dependence (heroin and prescription opioid) (2001-2014)

Figure 2.e.10. Neonatal abstinence syndrome discharges. Number of inpatient discharges for neonatal abstinence syndrome (2004-2014)

Source: Data from Ohio Department of Mental Health and Addiction Services (OhioMHAS) Multi Agency Community Information System as compiled and analyzed by OhioMHAS

Source: Ohio Department of Health
SHA key finding #1

Chronic disease

• *Obesity and hypertension*. Obesity and hypertension are highly-prevalent conditions reported by nearly one-third of Ohio’s adult population.

• *Diabetes*. The prevalence of adult diabetes rose from 10.4 percent in 2013 to 11.7 percent in 2014.

All three of these conditions were more common among middle-aged Ohioans (ages 45-64) than younger Ohioans, indicating that chronic disease will be a significant challenge for Ohio’s aging population in the coming years.
SHA key finding #1

Maternal and infant health
Racial and ethnic disparities in infant mortality stand out as a major challenge for Ohio.

Infant mortality, by race/ethnicity. Number of infant deaths (within 1 year), per 1,000 live births (Ohio, 2014; U.S. 2013)

Source: ODH, Vital Statistics Birth and Mortality Files (2014)
SHA key finding #1

Health behaviors

- **Tobacco use.** Ohio has higher rates of adult smoking, youth all-tobacco use, mothers smoking during pregnancy and children being exposed to secondhand smoke at home.

- **Nutrition.** Forty-two percent of Ohioans reported that they did not consume fruits on a daily basis and 26 percent did not eat vegetables on a daily basis in 2013; 16.8 percent of Ohioans identified as food insecure.

- **Physical inactivity.** Nearly one quarter of adults in Ohio aged 20 and over did not engage in any leisure-time physical activity.
SHA key finding #2

Many opportunities exist to decrease health disparities by:
• Race and ethnicity
• Income and education-level
• Age and gender
• Disability status
• Geography
**SHA key finding #2**

**Racial and ethnic disparities.** African-American/black Ohioans were much more likely than any other racial and ethnic group to experience poor health outcomes.

**Disparities by income.** Diabetes, obesity, hypertension and tobacco use were all more common among lower-income Ohioans (those with household incomes less than $25,000) than among Ohioans with household incomes at $50,000 or more.

### Ohio African-American/black performance compared to U.S. overall rate on metrics included in state health assessment data profile

<table>
<thead>
<tr>
<th>Category</th>
<th>Performance</th>
<th>Count (Metrics)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>BOLD</strong> Metrics for which African-American/black Ohioans perform better than U.S. overall rate (n=1)</td>
<td>14.3% (1 metric)</td>
<td>85.7% (6 metrics)</td>
</tr>
<tr>
<td>Metrics for which African-American/black Ohioans perform worse than U.S. overall rate (n=21)</td>
<td>100% (9 metrics)</td>
<td>100% (2 metrics)</td>
</tr>
</tbody>
</table>

*Population health, Healthcare system, Access to health care, Public health and prevention, Social and economic environment*
Disparities by age and gender. Diabetes and hypertension prevalence increased with age, greatly impacting those ages 65 and older.

Disparities by disability status. People with disabilities experienced substantial disparities across metrics related to health outcomes and accessing health care.

Disparities by geography. Appalachian counties in southern and eastern Ohio generally had poorer health outcomes, such as higher rates of premature death, although there are counties with significant health challenges in all areas of the state.
Access to health care has improved, but challenges remain especially related to:

- Disparities in accessing care
- Affordability of health insurance coverage and care
- Provider distribution and capacity, particularly for behavioral health and dental care

Unable to see doctor due to cost, by race/ethnicity. Percent of adults reported not seeing a doctor in the past 12 months because of cost (2014)

- White, non-Hispanic: 12%
- Black, non-Hispanic: 17.8%
- Hispanic: 16.1%
- Other, non-Hispanic: 13.9%
- Multiracial, non-Hispanic: 30%

Source: CDC. Behavioral Risk Factor Surveillance System (2014)
SHA key finding #4

Social determinants of health present cross-cutting challenges:

• Employment, poverty and education
• Social support
• Violence, trauma and toxic stress, including the high prevalence of intimate partner violence and adverse childhood experiences
• Physical environment, including transportation, housing, residential segregation, lead poisoning and air and water quality
SHA key finding #5

Opportunities exist to address health challenges at every stage of life
SHA key finding #6

Improved data collection efforts are needed to assess health issues at the local level and for specific groups of Ohioans

- Data is not consistently collected or reported across all population groups
- For many metrics, data is not available at the county-level

87 (60%) available at county-level*

57 (40%) Not available at county level

144 total metrics

*County-level data is limited for 17 metrics (e.g., may not be available for all counties or data for smaller counties may be reported in multi-county regions).
SHA key finding #7

Widespread agreement on health issues identified at local, regional and state levels can be an impetus for greater collaboration.

Health issues identified by local health departments and hospitals and at regional SHA forums

<table>
<thead>
<tr>
<th>Top 10 health issues</th>
<th>Identified in local health department and hospital assessments/plans</th>
<th>Identified in SHA regional forums</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mental health and addiction</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mental health</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Drug and alcohol abuse</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Chronic disease</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Obesity</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Cardiovascular disease</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Diabetes</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Cancer</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Chronic disease (unspecified)</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Maternal and infant health</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Maternal and infant health</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Health behaviors</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tobacco</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Nutrition</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Access to care</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Access to health care/medical care</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Access to behavioral health care</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Access to dental care</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Social determinants of health</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Employment, poverty and income</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Equity/disparities</td>
<td></td>
<td>X</td>
</tr>
</tbody>
</table>

Note: This summary includes the top 10 health issue categories, out of 36 possible categories. See Appendix C for complete analysis.

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SHA key finding #8

**Sustainable healthcare spending remains a concern** including metrics related to consumer out-of-pocket spending on health care and Medicare spending.

- Percent of metrics: Ohio spending is lower or same as U.S. (40% (6 metrics))
- Percent of metrics: Ohio spending is higher than the U.S. (60% (9 metrics))
What is the state health improvement plan (SHIP)?

An actionable plan to improve health and control healthcare costs

- Provides state agency leaders, local health departments, hospitals and other state and local partners with strategic menu of priorities, objectives and evidence-based strategies
- Signals opportunities for partnership with sectors beyond health
State Health Assessment (SHA)
State Health Improvement Plan (SHIP)

Local health departments
Community Health Assessment (CHA) and Community Health Improvement Plan (CHIP)

Hospitals
Community Health Needs Assessment (CHNA) and Implementation Strategy (IS)
Coordinate the implementation of evidence-based population health strategies.
SHIP priority outcomes

<table>
<thead>
<tr>
<th>Overall health</th>
<th>Mental health and addiction</th>
<th>Chronic disease</th>
<th>Maternal and infant health</th>
</tr>
</thead>
<tbody>
<tr>
<td>Health status (reduce poor or fair health)</td>
<td></td>
<td>Heart disease</td>
<td>Preterm births</td>
</tr>
<tr>
<td>Premature death</td>
<td>Depression</td>
<td>Diabetes</td>
<td>Low birth weight</td>
</tr>
<tr>
<td></td>
<td>Suicide</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Drug dependence or abuse</td>
<td>Asthma</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Drug overdose deaths</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
SHA/SHIP conceptual framework

World Health Organization definition of health: Health is a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity.
Framework for identifying objectives and strategies for the SHIP

<table>
<thead>
<tr>
<th>Priority topics</th>
<th>Mental health and addiction</th>
<th>Chronic disease</th>
<th>Maternal and infant health</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>↓ Depression</td>
<td>↓ Heart disease</td>
<td>↓ Preterm births</td>
</tr>
<tr>
<td></td>
<td>↓ Suicide</td>
<td>↓ Diabetes</td>
<td>↓ Low birth weight</td>
</tr>
<tr>
<td></td>
<td>↓ Drug dependence or abuse</td>
<td>↓ Asthma</td>
<td></td>
</tr>
<tr>
<td></td>
<td>↓ Drug overdose deaths</td>
<td></td>
<td>↓ Infant mortality</td>
</tr>
</tbody>
</table>

Cross-cutting factors

- Health equity
- Social determinants of health (including social, economic and physical environment)
- Public health system, prevention and health behaviors (including active living, healthy eating and tobacco-free living)
- Healthcare system and access

Strategies and objectives
- State commitments
- Local menu
## Ohio 2017-2019 State Health Improvement Plan (SHIP)

### Overall Health Outcomes
- ↑ Health status
- ↓ Premature death

### 3 Priority Topics
<table>
<thead>
<tr>
<th>Mental Health and Addiction</th>
<th>Chronic Disease</th>
<th>Maternal and Infant Health</th>
</tr>
</thead>
</table>

### 10 Priority Outcomes
- ↓ Depression
- ↓ Suicide
- ↓ Drug dependency/abuse
- ↓ Drug overdose deaths
- ↓ Heart disease
- ↓ Diabetes
- ↓ Asthma
- ↓ Preterm births
- ↓ Low birth weight
- ↓ Infant mortality

**Equity:** Priority populations for each outcome
### Cross-cutting factors

The SHIP addresses the 10 priority outcomes through cross-cutting factors that impact all 3 priority topics.

<table>
<thead>
<tr>
<th>Cross-cutting factors</th>
<th>Examples</th>
</tr>
</thead>
<tbody>
<tr>
<td>Social determinants of health</td>
<td>Student success</td>
</tr>
<tr>
<td></td>
<td>Economic vitality</td>
</tr>
<tr>
<td></td>
<td>Housing affordability and quality</td>
</tr>
<tr>
<td></td>
<td>Violence-free communities</td>
</tr>
<tr>
<td>Public health system, prevention and health behaviors</td>
<td>Tobacco prevention and cessation</td>
</tr>
<tr>
<td></td>
<td>Active living</td>
</tr>
<tr>
<td></td>
<td>Healthy eating</td>
</tr>
<tr>
<td></td>
<td>Population health infrastructure</td>
</tr>
<tr>
<td>Healthcare system and access</td>
<td>Access to quality health care</td>
</tr>
<tr>
<td></td>
<td>Comprehensive primary care</td>
</tr>
<tr>
<td>Equity</td>
<td>Strategies likely to decrease disparities for priority populations</td>
</tr>
</tbody>
</table>

The SHIP includes outcomes, objectives and evidence-based strategies for each cross-cutting factor.
Criteria for prioritizing strategies

- Evidence of effectiveness
- Potential size of impact
- Opportunities given the current status
Evidence sources reviewed at workshops

- Hi-5: Health Impact in 5 Years (CDC)
- 6/18: Accelerating Evidence into Action (CDC)
- The Guide to Community Preventive Services (Community Guide) (CDC)
- What Works for Health (County Health Rankings and Roadmaps)
- U.S. Preventive Services Task Force Recommendations (AHRQ)
- Additional topic-specific sources
Ensuring equity in the SHIP

- Impact underlying causes of health inequities by addressing the social determinants of health
- Highlight and prioritize strategies most likely to decrease disparities with “*” (based on WWFH and CG evidence reviews)
- Identify priority populations for each topic
- Recommend strategies be targeted towards certain priority populations and adapted to fit cultural contexts as needed
Ensuring equity in the SHIP, continued

- Set objective targets specific to identified priority populations (contingent upon the availability of baseline data)
- Identify priority population groups for which data is necessary but not available
- Make recommendations to invest in data infrastructure and linkages that can improve the collection and availability of data across population groups
Implications for behavioral health
Discussion questions

1. What do you see as the role for ADAMH boards and behavioral health providers in implementing SHIP-aligned strategies? How can this role be strengthened?

2. What are the current barriers and opportunities related to collaboration between ADAMH boards, behavioral health providers, local health departments and hospitals in community health assessment and planning?

3. What are the most important social determinants of health (SDOH) to address in order to improve the SHIP mental health and addiction outcomes?

4. What state-level policies are currently barriers to addressing these SDOH?

5. What state-level policy changes would help to better address these SDOH?