Introduction

Healthy people, healthy communities, healthy Pennsylvania

The State Health Improvement Plan (SHIP) is a multi-year strategic plan developed by the Pennsylvania Department of Health (DOH) in collaboration with a diverse public partnership of stakeholders across the commonwealth. This document sets health priorities and identifies strategies, goals and measurable outcomes for the next five years.

In 2014 and 2015, the Pennsylvania Department of Health brought together a diverse group of partners to create a strategic plan that would serve as a guide for efforts to improve the health of residents statewide in the years ahead. The result of that effort is the State Health Improvement Plan.

The SHIP identifies health goals, objectives, strategies, and assets to enable the stakeholders of the state’s public health system to coordinate efforts and provide more efficient and integrated programs. It can be used for state, regional, and local community health improvement planning, as well as regional and local community health assessment, agency strategic planning, operational planning, etc. Stakeholders can draw on this document as a resource for marketing, grant seeking, and identifying research and innovation opportunities, and it can be used for informing, educating, and empowering residents about key health issues.

Plan Development

The development of the SHIP began in April 2014, when the DOH convened the SHIP Steering Committee. The steering committee was responsible for leading the development and, going forward, for the evaluation of the SHIP. They reached broadly to identify stakeholders to invite to regional stakeholder meetings, to serve on the advisory committee, and later on task forces. The plans were developed in
accordance with Public Health Accreditation Board (PHAB) requirements. The steering committee was responsible for facilitating the advisory committee, stakeholder, and task force meetings. See Appendix B for steering committee members.

The SHIP Advisory Committee, comprised of 38 members from many areas of the public health system, convened in June 2014. This committee developed the vision for the SHIP: “Healthy people, healthy communities, healthy Pennsylvania.” The advisory committee met quarterly to advise the process and will continue to do so as the SHIP moves into implementation. They participated in several of the assessments that were used to identify the key health issues. Advisory committee members can be found in Appendix C.

Over seven hundred stakeholders in many public health roles were invited to participate in six regional meetings in July 2014. The SHIP vision was shared, as were key findings from the 2013 Pennsylvania State Health Assessment (SHA). Participants were asked about important health issues in their regions through a community themes and strengths assessment. Later, those stakeholders who did not attend the meetings were invited to provide information on community themes and strengths electronically.

In November 2014, the steering committee invited stakeholders to view a webinar on key findings from the completed assessments. After viewing the webinar, stakeholders were invited to participate in an online tool, Concept Mapping. The tool allowed stakeholders to sort and rate 48 strategic health issues identified during the analysis of the assessments. Over 150 stakeholders, representing 40 Pennsylvania counties and more than 25 areas of the public health system, participated in the concept mapping process.

An additional six regional stakeholder meetings took place in March 2015 to review and discuss the key health priority issues and statewide health statistics. The stakeholders selected five key health priority topics at each regional meeting; the priority topics were later condensed to three.

Three SHIP Task Forces, made up of about 100 experts in the selected priority topics, convened in May through July 2015. They were asked to describe the problem and its impact on health in the state’s population and to identify the population most in need of intervention. These task forces reviewed best practices, promising practices, evidence-based interventions, HealthyPeople 2020 objectives, other agencies’ and organizations’ statewide reports, and statewide health statistics to develop goals, objectives, strategies and activities for their priority area. The task forces were asked to identify assets and to serve as a lead or partner on strategies developed by their task force. They were asked to recruit local or regional groups or partners for implementation.

In preparation for implementation, each task force selected two co-chairs to coordinate meetings of the task force with the DOH, work with the task force members to collect information, and sit on the advisory committee. Appendices D, E and F list task force members.

**Assessment Strategies**

The model, Mobilizing for Action through Planning and Partnerships (MAPP), was used for the SHIP planning process. In addition, concept mapping was included as an additional tool.
**Mobilizing for Action through Planning and Partnerships:** The MAPP model, originated by the National Association of County and City Health Officials (NACCHO), relies on active stakeholder participation in the development, implementation and evaluation of a plan. Broad participation is essential to the process, which brings public, private and voluntary organizations together with community members and government agencies to determine the most pressing public health issues and effective strategies for addressing them. Figure 1 shows this process.

![Figure 1: MAPP model](image-url)

Four assessments, shown in the outer arrows of the MAPP model, were used to inform the development of the strategic issues of the SHIP.

**The 2013 Pennsylvania State Health Assessment**

The 2013 Pennsylvania State Health Assessment (SHA) is a report (published in March 2014) on the health status, health risks, and health care services in Pennsylvania. It identifies areas for health improvement; reports factors that contribute to health issues; and identifies assets and resources that can be mobilized to address population health improvement. The SHA was developed through a collaborative process coordinated by the DOH and included other state agencies and organizations that represented diverse state populations and state health challenges, as well as DOH bureaus and programs.

Ten major topics were identified:

- context of health
- general health status
- major risk and protective factors
- occupational health
- infectious disease
- injury and violence
• maternal and child health
• environmental health
• health care services
• chronic disease

Community Themes and Strengths Assessment
A survey to identify themes of perceived weaknesses and strengths of the regions was administered at stakeholder meetings throughout the commonwealth in July 2014. The most important health-related issues identified were:
• mental health;
• access to health care;
• chronic disease;
• obesity; and
• alcohol and drug abuse.

Strengths included:
• access to parks and recreation;
• local 24-hour police, fire, and rescue services;
• safe food supply;
• safe neighborhoods;
• access to arts and cultural events; and
• programs, activities and support for the senior community.

Themes that would improve the quality of life were:
• more jobs and a healthier community;
• access to quality health care for everyone;
• meeting basic needs of everyone;
• more jobs and a healthier economy;
• more programs, activities and support for youth and teens during non-school hours;
• access to affordable housing for everyone; and
• access to health education.

Forces of Change Assessment
The Forces of Change assessment identified forces that affect the context in which the community and its public health system operate. Six forces were identified:

• determinants of health
  o biology and genetics
  o individual behavior
  o social environment
  o physical environment
• economy
• demographics
• health systems change
• technology
• climate change

Common opportunities across the six forces included innovation, the transformation of health care, new research, and changes to legislation. Common challenges among the six forces included decrease or reallocation in public health funding, disparities, access issues and the cost of health care.

National Performance Standards
A modified State Public Health System Performance survey was administered to the advisory committee in September 2014. The survey was designed to examine planning, implementation, capacity, and resources of the public health system in Pennsylvania, including public, private and voluntary entities that contribute to public health activities and the health and well-being of its residents. The survey standards
relate to the 10 essential services of public health. Strengths and weaknesses that were identified are shown in Table 1 below.

**Table 1: Findings from State Public Health System Performance survey**

<table>
<thead>
<tr>
<th>Strengths</th>
<th>Weaknesses</th>
</tr>
</thead>
<tbody>
<tr>
<td>• surveillance</td>
<td>• financial resources</td>
</tr>
<tr>
<td>• laboratories</td>
<td>• failure to eliminate barriers to access to care</td>
</tr>
<tr>
<td>• coordination of response to public health threats</td>
<td>• access to health insurance</td>
</tr>
<tr>
<td>• threat/hazard response and planning</td>
<td>• public health workforce development</td>
</tr>
<tr>
<td>• collaboration to improve health and the public health system</td>
<td>• research</td>
</tr>
<tr>
<td>• knowledge of public health law and associated actions</td>
<td>• inability to mobilize and sustain partnerships</td>
</tr>
<tr>
<td></td>
<td>• evaluate public and personal health care services</td>
</tr>
</tbody>
</table>

**Community Health Needs Assessments (CHNAs) and Community Health Improvement Plans (CHIPs)**

CHNAs and CHIPs for county/city health departments and non-profit hospitals were reviewed to determine priorities identified by these assessments. Of the 10 county/city health departments in Pennsylvania, five had current CHIPs, Table 2.
Table 2: Priorities identified in local health assessments

<table>
<thead>
<tr>
<th>Area</th>
<th>Priorities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Allegheny County</td>
<td>• access to care &lt;br&gt; • chronic disease health risk behaviors &lt;br&gt; • environment &lt;br&gt; • maternal and child health &lt;br&gt; • mental health and substance use disorders</td>
</tr>
<tr>
<td>City of Bethlehem</td>
<td>• teenage pregnancy &lt;br&gt; • child abuse &lt;br&gt; • overweight and obesity &lt;br&gt; • substance abuse</td>
</tr>
<tr>
<td>Chester County</td>
<td>• cultural competence to expand access &lt;br&gt; • integrate physical and behavioral health (access) &lt;br&gt; • increase awareness of services (access) &lt;br&gt; • prevention &lt;br&gt; • supportive environments</td>
</tr>
<tr>
<td>Erie County</td>
<td>• nutrition (obesity, chronic disease) &lt;br&gt; • substance abuse &lt;br&gt; • tobacco &lt;br&gt; • physical activity (obesity, chronic disease) &lt;br&gt; • mental health &lt;br&gt; • suicide (mental health)</td>
</tr>
<tr>
<td>City of Philadelphia</td>
<td>• access to care &lt;br&gt; • behavioral health &lt;br&gt; • chronic disease</td>
</tr>
</tbody>
</table>

In addition, 131 non-profit hospitals were researched, and 126 of those were found to have plans. A total of 100 plans were reviewed (since several of the hospitals collaborated and developed joint products). The main priority issues identified by non-profit hospitals, and the percentage of hospital plans that identified them were:

- access to care – 76 percent <br> - chronic disease – 65 percent <br> - obesity – 51 percent <br> - substance abuse – 43 percent <br> - mental health – 33 percent <br> - other – 42 percent

“Other” responses included “community and economic development to address the high rates of poverty and unemployment” and “workforce development and diversity.”

**Concept Mapping**

Concept mapping was a strategy that involved many stakeholders in the assessment process. Through individual and group-oriented data collection activities, concept mapping supports the development of group consensus, shows relationships between ideas, and facilitates the prioritization and organization of collected information.
Concept mapping is a participatory research approach that involves stakeholders in this process:²,³

- creating a project focus prompt and rating questions
- sorting items and rating them with regard to their relationship to the focus prompt
- generating visual depictions of the data
- interpreting the data
- utilizing the data in a way that allows stakeholders and researchers to take action

Concept mapping occurred in three parts. The first phase involved the development of a focus prompt and the collection of responses to that prompt.

Based on review of the Forces of Change Assessment, the Community Themes and Strengths Assessment, National Performance Standards, the 2013 SHA, and CHNAs and CHIPs, a list of 48 health topics was created. (See Figure 2.) The focal question for this phase was “What are the health issues in Pennsylvania?”

The second phase of concept mapping was sorting and rating. In December 2014 and January 2015, stakeholders clustered the responses and prioritized them. First, the 48 individual topics were sorted into piles of similarity. After sorting, stakeholders ranked items from 1 to 4 on Likert scales for the questions “How important is each individual health issue listed here to the population you serve?” and “What is the likelihood that a statewide, strategic, and coordinated effort could make a measurable impact on this health issue?” The Concept Systems Global⁴ (Concept Systems, Inc.) web-based program was used by 157 stakeholders from 40 counties and more than 25 areas of the public health sector.

The third part of concept mapping for the SHIP involved analysis and interpretation of the findings. This process showed that 20 of the original 48 health issues were ranked high for both importance and likelihood that a statewide, strategic and coordinated effort could address this health problem. This subset was presented to the advisory committee for further consideration.
Figure 2: SHIP concept mapping health topics

<table>
<thead>
<tr>
<th>Drug and alcohol abuse by adults ↑</th>
<th>Health/dental/vision insurance ↑</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adolescent tobacco use</td>
<td>Adverse childhood experiences</td>
</tr>
<tr>
<td>Immunizations</td>
<td>Sexually transmitted diseases (STDs)</td>
</tr>
<tr>
<td>Cancer</td>
<td>Transportation</td>
</tr>
<tr>
<td>Lyme disease</td>
<td>Cerebrovascular disease/stroke</td>
</tr>
<tr>
<td>Primary care ↑</td>
<td>Prenatal/obstetrical care</td>
</tr>
<tr>
<td>Knowledge of available services ↑</td>
<td>Unintentional injuries</td>
</tr>
<tr>
<td>Suicide</td>
<td>Obesity ↑</td>
</tr>
<tr>
<td>Infant mortality</td>
<td>Education ↑</td>
</tr>
<tr>
<td>Diseases of the heart ↑</td>
<td>Secondhand smoke</td>
</tr>
<tr>
<td>Drug and alcohol use by adolescents ↑</td>
<td>HIV/AIDS</td>
</tr>
<tr>
<td>Behavioral/mental health for adults ↑</td>
<td>Asthma</td>
</tr>
<tr>
<td>Behavioral/mental health for children ↑</td>
<td>Integration of healthcare and behavioral/mental healthcare</td>
</tr>
<tr>
<td>Homicide</td>
<td>↑</td>
</tr>
<tr>
<td>Poverty</td>
<td>↑</td>
</tr>
<tr>
<td>Arthritis</td>
<td>↑</td>
</tr>
<tr>
<td>Chronic kidney disease</td>
<td>↑</td>
</tr>
<tr>
<td>Health care ↑</td>
<td>↑</td>
</tr>
<tr>
<td>Alzheimer’s disease</td>
<td>↑</td>
</tr>
<tr>
<td>Physical inactivity ↑</td>
<td>↑</td>
</tr>
<tr>
<td>Chronic lower respiratory disease</td>
<td>↑</td>
</tr>
<tr>
<td>Specialist care</td>
<td>↑</td>
</tr>
<tr>
<td>Preventive screenings ↑</td>
<td>↑</td>
</tr>
<tr>
<td>Diabetes ↑</td>
<td>↑</td>
</tr>
</tbody>
</table>

↑ denotes item was ranked “high” for both importance and ability to be measurably impacted by a statewide effort.

○ denotes item was short-listed by the advisory committee for stakeholders’ consideration.

Priority Selection

The 20 health issues identified during the concept mapping process are shown in Table 3. They were presented to the advisory committee, which reviewed statewide health statistics, assessments, and community health needs assessments and improvement plans and recommended 11 health priority issues.
Table 3: Subset of 20 health issues

<table>
<thead>
<tr>
<th>Health Issue</th>
<th>State Health Assessment (2013)</th>
<th>MAPP Themes and Strengths</th>
<th>Forces of Change</th>
<th>National Performance Standards</th>
<th>CHNA/CHIP</th>
</tr>
</thead>
<tbody>
<tr>
<td>Access to healthy food</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Behavioral/mental health for adults</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Behavioral/mental health for children</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Communicable disease</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Diabetes</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Diseases of the heart</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Domestic violence</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Drug and alcohol abuse by adolescents</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Drug and alcohol abuse by adults</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Education</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Health care</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Health literacy</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Health/dental/vision insurance</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Integration of healthcare and behavioral/mental healthcare</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Knowledge of available services</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nutrition</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Obesity</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Physical inactivity</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Preventive screenings</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Primary care</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The eleven health issues identified by the SHIP Advisory Committee were:

- preventive screenings;
- obesity;
- drug and alcohol abuse by adults;
- nutrition;
- integration of health care and behavioral/mental health care;
- communicable diseases;
- behavioral/mental health for adults;
- behavioral/mental health for children;
- primary care;
- physical inactivity; and
- education.

As shown in Figure 3, these issues were presented to the stakeholders at six regional stakeholder meetings. The stakeholders were provided relevant health statistics to assist with the selection of the priority health issues. The stakeholders identified five regional key health issues.
The results of the regional stakeholder meetings were presented to the advisory committee. Of the eleven health issues, only two (education and communicable diseases) were not in the top five of at least one of the regions. The advisory committee took the remaining health issues and grouped them into three health priority areas and a list of cross-cutting themes.

Three health priority areas:

- behavioral/mental health for adults and children, drug and alcohol abuse by adults
- obesity, physical inactivity, and nutrition
- primary care, preventive screenings

Five cross-cutting themes that have an impact on residents’ health:

- health literacy
- public health system
- health equity
- social determinants of health
- integration of primary care and mental health
"What are the health issues in Pennsylvania?"
48 topics (See Figure 2.)
Forces of Change Assessment, Community Themes & Strengths Assessment, 2013 Pa. State Health Assessment, and Community Health Needs Assessments and Community Health Improvement Plans

“How important is each health issue to the population you serve?”
“What is the likelihood that a statewide, strategic & coordinated effort could make a measurable impact on this health issue?”
20 topics (See Table 2.)
Results assessment, concept mapping

Advisory Committee Concept Mapping
11 topics (See p. 11.)

State Health Improvement Priorities 3 priorities

Cross-Cutting Themes
health literacy public health system
health equity social determinants of health
integration of primary care and mental health
In the process of reviewing the health priority areas, the task force members renamed their task forces as follows:

- Obesity, Physical Inactivity, and Nutrition
- Primary Care and Preventive Services
- Mental Health and Substance Use

DOH staff, together with the task forces and advisory committee will monitor progress towards achieving the goals and objectives identified in the plan. The SHIP and the ongoing process of its development and assessment reflect the efforts of many of the key players in the public health system to work together and improve residents’ health. Figure 4 summarizes the development and implementation process of the SHIP.

**Figure 4: Development and implementation of the Pennsylvania SHIP**

- **SHIP Advisory Committee**
- **SHIP Steering Committee**
- **Regional Stakeholders**
- **Task Forces**
  - Obesity, Physical Inactivity, and Nutrition
  - Primary Care and Preventive Services
  - Mental Health and Substance Use
- **Pennsylvania State Health Improvement Plan 2015-2020**
  - Annual Implementation Progress Reports
  - SHIP Strategy Lead Agencies and Organizations
  - SHIP Strategy Partner Agencies and Organizations
  - Community Organizations