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Systems Change for Health

Competencies for the Public Health Workforce

substance use
health inequities
physical activity
diabetes
injury & violence
tobacco use
special healthcare needs
worker safety
environmental hazards

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Introduction

Throughout the country, public health professionals are helping communities decrease the burden of disease and injury by making it easier to develop a healthy lifestyle. Rather than change the individual behavior of one person at a time, they are improving governance and organizational systems, influencing public and private policies, and enhancing built environments. These strategies arise from the very roots of the public health profession which focuses on population-level impact to improve everyone's health.

Public health professionals are learning to focus their efforts on ensuring that healthy behaviors can become daily routines. For example:

- Creating community systems for addiction treatment and recovery
- Planning and developing walkable neighborhoods
- Guaranteeing access to smoke-free public places
- Regulating tobacco marketing
- Ensuring that only nutritious beverages and foods are available on school property
- Providing daily physical activity to all students
- Requiring bicycle helmets for all riders
- Ensuring that safety seats are available and used by children riding in motor vehicles
- Providing preventive health insurance benefits
- Requiring a Health Impact Assessment as part of the land-use planning process

These improvements are happening in many places – however, such changes take time, sometimes years, and often involve many stakeholders. For example, increasing school requirements for physical activity can involve educating the school board, school district superintendent and school principals about the prevalence of youth obesity and the importance of ensuring daily physical activity for all students. It also involves helping the administrators and teachers identify practical ways to provide this important activity in an already busy curriculum. Other times the collaborative effort involves non-traditional partnerships with new agencies like the city/county planning department. It may require learning about the interests of stakeholders like the local business community.

In many places, public health collaborations and partnerships are learning to propose and respond to legislation, convince worksites to adopt certain policies, and refine zoning ordinances to ensure more livable environments. Although the process can be complex, the potential health and economic impact can be profound when entire populations adopt healthier behaviors. These population-based approaches can help federal, state, and local health agencies apply evidence-based strategies to achieve equitable health outcomes. However, skilled staff and supportive management are needed to ensure the strategies are implemented to their full potential. *Systems Change for Health™* (SCH) is a competency-based curriculum to address this need.

This document provides the following information:

- How were the SCH competencies developed?
- How do the SCH competencies relate to the 10 Essential Services and other competencies?
- Which professionals might benefit from the SCH competencies?
- List and define the SCH competencies

Purpose of this document

Identify the competencies needed to change systems, policies, and built environments.

Who is it for?

Public health professionals including: health agency directors and commissioners, division directors, program managers, health promotion staff, health educators, clinical staff working in health promotion and preventive medicine.

Systems Change for Health curriculum

A national training curriculum is available at: SystemsChangeForHealth.web.unc.edu.

How Were the SCH Competencies Developed?

The Directors of Health Promotion and Education (DHPE) in collaboration with the Centers for Disease Control and Prevention (CDC) reported in *Policy and Environmental Change: New Directions for Public Health* (2001) about the efforts of state and local agencies to improve health outcomes by using strategies that change policies and environments. The report recommended that health policy and environmental change competencies be identified and a training curriculum developed to ensure the workforce is skilled in collaboratively applying such strategies.

DHPE contracted with faculty and staff at the UNC Gillings School of Global Public Health to develop the competencies and the curriculum. The project team conceptualized the work in three phases of research:

- **Phase 1** – Identify an initial list from competency compendiumsⁱ and other secondary sources, and receive feedback from DHPE and CDC stakeholders.
- **Phase 2** – Conduct an iterative revision process to incorporate feedback from cycles of interviews with approximately 100 federal, state and local potential end-users of the competency list and future training curriculum. Compare the working version with three published competency listsⁱⁱ and incorporate similar language as appropriate.
- **Phase 3** – Conduct a validation and skills-gap analysis. Convene a Curriculum Advisory Committee to support the development of a competency-based curriculum. Develop and pilot the *Systems Change for Health™* courses.

How Do the SCH Competencies Relate to the 10 Essential Services and Other Competencies?

The public health system performs the three functions of assessment, policy development, and assurance by delivering 10 Essential Services to citizens. The SCH competencies can help a local health agency provide the following Essential Services: diagnosing health problems (#2); developing policies and plans (#5); and ensuring a competent public health workforce (#8). Public health professionals who become proficient in the SCH competencies will be able to assess problems that need a systems, policy, or built environment solution. They will have the necessary skills to help federal, state, and local agencies propose solutions meant to improve equitable health outcomes while ensuring economic and political feasibility. With these skills, professionals working in health departments will be able to help those agencies demonstrate staff competence for health promotion.

Public health professionals working on systems change will need unique skills such as: issue framing, policy analysis, policy formulation, message tailoring, and media advocacy. This document includes these unique skills within specific competencies that amplify the policy-related competencies found in other sourcesⁱⁱ. The SCH competencies do not address other skills that indirectly support work on systems, policies, and environments. For example, “collaborates with community partners” and “communicates effectively” are core competencies that are necessary to have mastered prior to working on systems change. For more information about basic public health skills, read about the *Core Competencies for Public Health Professionals* available at: <http://www.Train.org>.

Which Professionals Might Benefit from the SCH Competencies?

The SCH competencies can benefit staff who develop and implement health promotion programs and community health education projects. Such staff might include: health promotion coordinators, health educators, program managers, nutritionists, evaluators, non-profit staff, executive-level managers, and clinical staff who may also work on population-based strategies. The list of competencies can serve as a guide for hiring people with policy-related experience, training and managing staff, developing workplans, and conducting performance appraisals.

The SCH competencies cover a range of skills, therefore, it might not be realistic to expect one employee to become proficient in all of them. It might be more feasible to consider each staff's responsibilities and ensure proficiency in the relevant competencies. Additionally, employees will vary in their level of proficiency on these competencies. Professionals who are new to this work will probably focus on acquiring a basic mastery of select competencies. Staff can use these competencies to identify training opportunities that will increase their proficiency over time. Professionals who are more experienced might use these competencies to refine the "art" of assessing the local political climate and working effectively with both supporters and opponents to further state or local agency goals.

List and Define the SCH Competencies

The SCH competencies are grouped into five domains or areas of responsibility. The domains are ordered to suggest an iterative sequence of steps found in both public health interventions and policy advocacy campaigns. The next few pages provide a brief description of each domain and then list the specific competencies. A concise list of the competencies is presented at the end of this document.

Five Competency Domains

1. **Assessing and defining the problem**
2. **Analyzing potential solutions**
3. **Influencing the systems change process**
4. **Implementing system changes**
5. **Evaluating systems change interventions**

1. Assessing and defining the problemⁱⁱⁱ

Many public health problems are complex and arise from more than one potential cause (e.g., obesity, cardiovascular disease). Public health professionals need to collaborate closely with partners and other stakeholders to skillfully articulate the root causes of a problem and identify how the health, political and organizational systems have contributed.

Domain #1 Competencies

- a. **Collects, summarizes, and interprets information relevant to an issue³**
- b. **Defines the problem needing a policy, system, or environmental solution**

To understand the problem's complexities, evidence must be collected, analyzed and summarized, especially information about the constituency of the decision-makers. Information sources might include health, education, economic, and transportation data; public policy databases; published research; media; organizational reports; and long-tenured agency staff who remember past efforts at solving the problem. It is critical to learn about past attempts to address the problem through changes in policies, systems or the built environment.

Understanding the problem also requires a familiarity with the current political climate, such as how decision-makers feel about the issue, and whether they might be supporters or opponents of change. Decision-makers are influenced by many stakeholders, including people who can be considered the policy elites, and these interested stakeholders must become part of the analysis. Understanding the political climate includes becoming familiar with the relevant pieces of the public health system; policy processes at all government levels; the policies and procedures of any stakeholders' organizations; and governmental processes to improve the built environment including those that do not require policy change.

Someone who is proficient in these competencies will have the skills needed to continually tailor the description of a problem to the interests of diverse groups. They will be able articulate a concise problem statement that suggests the need for a system solution.

2. Analyzing potential solutions

Generally, the way a public health problem is framed will suggest a type of solution. How a problem is understood helps determine whether educational, legislative or procedural and regulatory pathways are used to improve the situation. Public health professionals and their partners will benefit from being able to formulate solutions that address issues at multiple levels.

For example, the problem of youth obesity might be framed in terms of how the school setting provides opportunities to be physically active during the school day. Possible solutions might include changing school policy, state legislation, and the built environment.

For example, a **local policy** solution might include school or school district (local education authority) policies defining how often physical education (PE) classes and active recess are provided for each student. **Statewide legislation** could establish PE standards for all districts and certification requirements for PE teachers. A **built environment** solution might establish indoor and outdoor facilities for active recreation of many sorts. A **systems** solution could include all of these changes across multiple levels (e.g., classroom instructional techniques, school recess and PE activities, district PE teacher credentialing and daily activity requirements per student, state agency incentives for districts with policies that require daily physical activity for all students and demonstrate participation).

Sometimes more than one alternative solution will seem possible, especially when the perspectives of diverse stakeholders are included. In order to provide recommendations to decision-makers, it will be important to compare the solutions to one another and to the current, unchanged situation. Public health professionals who develop these competencies will be better able to work with partners to define criteria for selecting among multiple proposed solutions. They will become proficient at analyzing and identifying an optimal choice, and working with partners to frame the solution for the targeted policy-makers, planners, and government staff who implement procedures.

3. Influencing the systems change process

This competency domain accounts for the full range of actions public health professionals and their partners may use to influence change processes. For example, many public health professionals provide education on health-related problems and the potential impact of proposed solutions. Many professionals also develop communication strategies to inform the general public and officials about health issues and possible solutions.

However, state and local agencies vary in how much they allow staff to engage in the political process. For example, federal and state laws place limits on lobbying by government and non-profit agencies. Agencies and private organizations might place additional limits on their employees' advocacy activities. For example, some agencies strictly regulate employee communication with government officials and do not permit staff to work on policy issues.

Domain #2 Competencies

- a. Defines criteria for selecting among proposed options to improve the problem
- b. Records the options in clear and concise written statements³
- c. Estimates the health, fiscal, administrative, legal, social, and political implications of each option³
- d. Predicts the feasibility and expected outcomes of each option³
- e. Analyzes the options using decision analysis methods (e.g., cost-benefit)³
- f. Builds consensus for the chosen course of action

Domain #3 Competencies

- a. Plans an approach to change policies, systems, built environments
- b. Educates decision-makers, media, partners, and the general public by providing relevant information (i.e., become an informational resource)
- c. Frames messages and tailors materials to influence the change process
- d. Implements policy-advocacy strategies
- e. Implements communications strategies to impact social learning, agenda setting, and message framing
- f. Monitors the change process and its outcome

Therefore, before starting to work on systems changes, it is important that public health professionals learn about the laws and organizational policies that might restrict their advocacy activities. It is also important to distinguish between legal and managerial restrictions regarding advocacy strategies. Constraints that are not legal, might be alleviated by staff helping upper management better understand what is needed to accomplish this type of health promotion work and demonstrating their competency.

Proficiency in this competency domain will help ensure that the public health professional can serve as a resource to decision-makers and media. Within the limitations of their position, and with their partners, they will be able to use advocacy and communications strategies to frame key messages, promote social learning, and influence the policy agenda. With partners, they will vigilantly monitor the change process to ensure that the resulting changes match the intended goal.

4. Implementing system changes

Once a systems change has been enacted, it is important for the interested stakeholders to remain vigilant and engaged while the enacted change is developed into various agency's budgets, rules, guidelines, and procedures. Many decisions will be made by staff in those separate agencies, organizations and departments. If no one monitors the outcome of this decision phase, an enacted victory for public health can become administratively weakened and result in a negligible impact.

For example, once a city/county executive or commission approves a policy that requires installing missing segments of sidewalk, that commitment must be supported in budgets (e.g., the capital improvement plan for the city/county or a department's maintenance/repair budget). Without financial support the environmental change could lose priority among staff members who oversee improvements that are a funded priority. When a policy leaves the legislative entity that formulates and approves it, public health professionals and/or partners should meet with the implementing staff to help ensure the intention of the policy survives the process of translation into public works procedures.

Proficiency in this competency domain will ensure that public health professionals remain vigilant through this important, and frequently forgotten, phase of the systems change process.

5. Evaluating systems change interventions

Public health professionals might already be familiar with evaluating both the process and impact of a program, and those skills will be helpful when considering how to evaluate systems change.

Because public health professionals are increasingly under pressure to demonstrate outcomes, it is important to evaluate the changes to systems, policies, and environments so that decision-makers can understand the results of their efforts. It is equally important to understand why the intended change succeeded or failed. The analytic process of evaluation provides those answers.

Domain #4 Competencies

- a. Predicts how the relevant bureaucratic entities (e.g., agencies, departments) might implement the enacted changes**
- b. Plans how to monitor and assist each entity as it develops the budgets, rules, guidelines and procedures necessary to implement the enacted change**
- c. Assists entities with planning for structural and programmatic adjustments**
- d. Monitors the implementation process to document how the solution is or is not functioning as intended**

Domain #5 Competencies

- a. Develops mechanisms to monitor policy/system/environmental change**
- b. Evaluates the impact of the change**
- c. Incorporates evaluation findings into future planning and analysis efforts**

With research yielding ever more evidence-based strategies for system change, the evaluation focus might be limited to monitoring the outcomes to report on the subsequent changes. However, sometimes

Evaluation might include documenting what was changed and measuring the impact it had on the built environment, the relevant organizational systems, human behavior, and ultimately on the health problem being addressed. Collaborating partners can participate in the evaluation measures, analyses, and reporting so that they learn how their organization's efforts contributed to reducing the problem. Evaluation results can also help staff and partners understand how to become ever more competent at this type of intervention work.

Policy change is not a quick process – it takes dedication, broad collaboration, strategy and an ability to identify opportunities. Public health professionals who are competent in evaluation will be able to reinforce the commitment of their partners for the long-term effort by showcasing improvements.

For More Information

This document and information about the entire Systems Change for Health™ curriculum is available at: SystemsChangeForHealth.web.unc.edu.

***Systems Change for Health™* Competencies**

1. Assessing and defining the problem

- a. Collects, summarizes, and interprets information relevant to an issue³
- b. Defines the problem needing a policy, system, or environmental solution

2. Analyzing potential solutions

- a. Defines criteria for selecting among proposed options to improve the problem
- b. Records the options in clear and concise written statements³
- c. Estimates the health, fiscal, administrative, legal, social, and political implications of each option³
- d. Predicts the feasibility and expected outcomes of each option³
- e. Analyzes the options using decision analysis methods (e.g., cost-benefit)³
- f. Builds consensus for the chosen course of action

3. Influencing the systems change process

- a. Plans a policy/system/environmental change approach
- b. Educates decision-makers, media, partners, and the general public by providing relevant information (i.e., become an informational resource)
- c. Frames messages and tailors materials to influence the change process
- d. Implements policy-advocacy strategies
- e. Implements communications strategies to impact social learning, agenda setting, and message framing
- f. Monitors the change process and its outcome

4. Implementing system changes

- a. Predicts how the relevant bureaucratic entities (e.g., agencies, departments) might implement the enacted changes
- b. Plans how to monitor and assist each entity as it develops the budgets, rules, guidelines and procedures necessary to implement the enacted change
- c. Assists entities with planning for structural and programmatic adjustments
- d. Monitors the implementation process to document how the solution is or is not functioning as intended

5. Evaluating systems change interventions

- a. Develops mechanisms to monitor policy/system/environmental change
- b. Evaluates the impact of the change
- c. Incorporates evaluation findings into future planning and analysis efforts

ⁱ Seventy-six competency sets were identified as related to the project, including competency sets listed in *The Future of Public Health in the 21st Century* (Institutes of Medicine, 2003), and often-cited public health competency projects sponsored by the Council on Linkages between Academic and Practice, SOPHE – AAHE – NCHCEC, and ASPH. (Complete methods reported in Crump, Letourneau and Emery (2004) report to DHPE, and presented by Crump and Emery to DHPE (2005), CDC (2006) and at national conferences (2006).

ⁱⁱ *Core Competencies for Public Health Professionals: National Health Educator Competency Update Project*; Association of Schools of Public Health core competencies for MPH degree.

ⁱⁱⁱ *Core Competencies for Public Health Professionals* (developed by the Council on Linkages between Academia and Public Health Practice; <http://www.Train.org>).