Abstract

The National Center for Public Health Informatics (NCPHI) at the Centers for Disease Control and Prevention (CDC) has developed a conceptual framework that can be used to set the context for communities of practice (CoP) related to its Public Health Information Network (PHIN).

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COMMUNITIES OF PRACTICE

This poster will provide a graphic representation of the conceptual framework that unites PHIN partners within CoPs to solve common problems, learn new practices, exchange information, and otherwise improve the implementation of PHIN.

The conceptual framework sets CoPs within an adapted federated model and uses the principles of community-based participatory approaches to guide the activities. This presentation presents the model and explains how a theory of change approach has been generated to explore how CoPs are expected to influence PHIN on three different levels: individual, organizational, and programmatic.

Several examples of guiding theories, such as social capital and social networks, will be given. Theories such as these will provide the means by which expected PHIN outcomes can be compared to actual outcomes.

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Community of Practice (CoP) Definition

A group of people who share a concern, a set of problems, or a passion about a topic, and who deepen their knowledge and expertise by interacting on an ongoing basis. (Wenger)

A CoP has three crucial characteristics:



CoP Environment

Federated Approach

- O Distributed ownership
- Shared responsibilities
- CDC functions as an equal partner
- CDC provides:
- Support architecture
- Common infrastructure (e.g., collaboration tool)
- Services
- (e.g., evaluation, consultation, etc.)

Community Based Participatory Approach

- O Cultivate community involvement
- Engage all partners at multiple levels
- Facilitate collaboration
- Value common interests, information, technologies
- Promote PHIN buy-in
- Conduct evaluation

(e.g., program documentation, templates, etc.)

• Define and measure community outcomes







Theory of Change Approach

A theory of change approach to evaluation has been defined simply as "a theory of how and why an initiative works" (Weiss, 1995) and more complexly as "a systematic and cumulative study of the links between activities, outcomes, and contexts of the initiative" (Connell & Kubisch,

In a theory of change approach, the desired or expected outcomes, which are based in theoretical assumptions, are compared to what actually happens.

Using a theory of change approach allows:

- evaluation of the process of how CoPs develop over time
- a better understanding of the context of change
- improved prediction of outcomes

This systematic and cumulative study of links between activities and outcomes replaces traditional process documentation, implementation, and outcome studies.

It also reduces problems associated with causal attribution of impact. By specifying up front, how activities will lead to interim and longer-term outcomes and identifying the contextual conditions that may affect them, the scientific case for attributing subsequent change in these outcomes (from initial levels) is improved significantly.

CDC's Conceptual Framework for PHIN Communities of Practice

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CoP's Impact on PHIN

People

- All partners working on PHIN initiatives are involved in joint decision-making and problem-solving
- Open, collaborative relationships
- Best practices

Processes

- Requirements for interoperability and linkage to national activities
- Adherence to standards
- O Certification criteria

Tools

- Hardware/software
- System infrastructure
- Applications

Evaluation Framework

Goal: To examine how the implementation of PHIN and its initiatives are improved by the use of CoPs





Evaluation: CoP Outcomes to Improve PHIN



Summary

The use of communities of practice provides a new way of doing business for PHIN partners. By harnessing the creativity and synergy produced by these communities and evaluating activities using a theory of change approach, predictions can be made concerning a wide range of outcomes:

- CoPs will provide an opportunity for PHIN partners to reorganize and better target areas of practical need
- Given the opportunity for equal participation and joint decision-making, community members will increase their involvement in PHIN initiatives
- CoPs will be aligned with PHIN functional areas rather than specific tools or applications
- CoPs will offer fertile ground to produce novel approaches to existing issues
- Novel ideas and best practices will be disseminated rapidly both within and outside of CoPs
- Ultimately, the implementation of PHIN and its initiatives will be improved by the use of CoPs