Ripple Effect Mapping: Visually capturing the impacts of policy, systems, and environmental changes to advance health equity

Through their Health Equity in Prevention (HEiP) initiative, the Center for Prevention at Blue Cross and Blue Shield of Minnesota (Blue Cross) awarded contracts to 13 organizations working to implement policy, systems, and environmental changes to support health and advance health equity. The Promising Practices series highlights successful strategies used by these organizations and important lessons learned that can be used by other organizations to inform their work. The series also serves as a reference for other funders interested in supporting effective strategies to promote health.

Overview

Significant time and resources are often needed to increase community awareness and buy-in before prioritizing health and seeking policy, systems, and environmental (PSE) changes. During the first two years of the HEiP initiative, the funded organizations used multiple strategies to lay the foundation for PSE changes, such as building the capacity of their staff to address health equity, working with residents to be advocates and decision makers, and establishing organizational networks or coalitions. While this work is critical, measuring the impact and value of these efforts is difficult, particularly in a broader community context where shifting political, economic, and social environments influence community support, funding, and other factors that ultimately impact the feasibility for PSE changes.

Ripple Effect Mapping (REM) is an evaluation approach developed to address these measurement challenges. This brief describes the REM process, including its benefits and limitations, and then discusses how it was used to evaluate the efforts of 10 HEiP-funded organizations working to implement PSE changes to advance health equity within their respective communities.
What is Ripple Effect Mapping (REM)?

REM is an evaluation tool that was developed to document the intended and unintended impacts of multi-faceted community-based initiatives or projects that are not easily captured by other evaluation methods. It is most appropriate for complex interventions, projects that require collaboration among multiple stakeholders or sectors, and in emergent or evolving community contexts.

The method involves a facilitated group discussion with around 12 to 20 project staff, partners, community members, and other key stakeholders. During the discussion, participants share the project impacts or “ripples,” which are recorded on sticky notes and taped to a wall or digitally projected on a screen. Together, all of the ripples form a map that displays specific links between a project’s activities and resulting changes in the community. For more information and to see examples of Ripple Effect Maps visit Wilder Research or the University of Minnesota Extension.

How does REM help engage stakeholders?

In addition to its use as an evaluation tool, REM offers opportunities to engage stakeholders. Discussion participants co-create the ripple effect map developed during the facilitated discussion, validating the information gathered during the conversation. The process establishes a shared understanding of the project by helping stakeholders: see how their contributions tie into larger efforts that inform a project, re-energize their enthusiasm for the work, and identify potential action steps.

What are policy, systems, and environmental (PSE) changes?

While people’s health is affected by their individual behavior, other factors such as the environment, organizational practices, rules, and laws also play key roles. PSE approaches attempt to understand and address these factors in an effort to create sustainable changes that impact people’s choices and health.

**Policy change** – a change in laws, ordinances, and regulations, or smaller scale changes to an organization’s rules, mandates, or practices. Examples include a smoke-free policy in an apartment building or a city ordinance making it easier for corner stores and gas stations to sell fresh food.

**Systems change** – a change that influences all aspects of an organization, institution, or system, such as a school district, health care system, or local government. Systems changes often work in tandem with policy changes. Examples include implementing Complete Streets standards in infrastructure planning or having a school district establish criteria around sourcing and providing fresh produce for school lunches.

**Environmental change** – a change to the physical, economic, or social environment. Examples include installation of new sidewalks, raising the cost of unhealthy foods or beverages to discourage consumption, and increasing the acceptance of limiting unhealthy food items at workplace gatherings.

Adapted from the Minnesota Department of Health: [http://www.health.state.mn.us/healthreform/ship/techassistance/pse02222012.pdf](http://www.health.state.mn.us/healthreform/ship/techassistance/pse02222012.pdf)

Why is REM useful for documenting policy, systems, and environmental (PSE) changes?

PSE changes are often complex and can involve a number of stakeholders, organizations, and individuals. Prior to PSE changes being implemented, time is needed for residents to establish networks...
or coalitions for sharing resources and to be engaged in decision-making structures (e.g., local and state government) that ultimately impact their health. REM helps organizations understand the work leading up to and the impact of PSE changes because it: 1) brings together a diverse group of stakeholders who, together, can identify the project’s impact in the community; 2) captures the aligned efforts of other organizations influenced by the project (the “ripples”); and 3) allows flexibility to capture unintentional positive and negative impacts that may not be captured by focusing primarily on the program’s work plan or project goals.

What are the limitations of REM?

There are key limitations that should be considered before using REM as an evaluation approach. First, REM helps document an initiative’s breadth and community impacts; other evaluation approaches may be more appropriate when stakeholders are interested in understanding very detailed information about a specific intervention component or the outcomes of specific project objectives. Second, there is the risk of introducing bias when selecting discussion participants. It is important that facilitators and project staff work together to invite people who will bring a variety of opinions and thoughts to the discussion. Other tools, such as key informant interviews or surveys, may be needed to capture feedback from stakeholders and community residents who did not participate in the discussion. Finally, many efforts contribute to community changes. During a REM session, it may be difficult or inaccurate to make a direct connection between a project activity and a broader community change. However, REM can show where efforts have contributed to changes, even when other factors may have played a part. Additionally, because participants may not have complete information about a project or intervention, project staff may need to clarify details from the discussion and describe how key aspects of the work may tie together.

How was REM applied to the HEiP initiative?

Between late 2014 and early 2015, 10 HEiP-funded organizations held REM discussions to better understand the impact of their work. Two of the ten discussions were facilitated in both English and Spanish with the help of a translator. Staff from Wilder Research worked with project leads from the funded organizations to identify potential participants for the REM discussions. Up to 18 stakeholders, including project staff, attended each organization’s discussion.

What impacts did REM document from the HEiP initiative?

While PSE changes are one of the key long-term goals of the HEiP initiative, they made up a small share of the total impacts identified across the 10 projects during the REM discussions. Given that projects at the time of their REM sessions were still in the early stages of their work, it is not surprising that the most common impacts were related to building support, knowledge, and capacity to advance PSE changes. The most commonly reported types of impacts were in the areas of:

- Generating new knowledge, skills, and awareness through education events, sharing data, and providing technical assistance.
- Forming coalitions, partnerships, and informal organizational connections to cultivate support, advocate, and share resources and information.
Organizing community engagement through one-time events, campaigns, and more established groups or classes.

Although most of the reported impacts related to laying the foundation for PSE changes, REM discussion participants did identify 27 changes in policy, 15 changes in organizational policy and practices, 31 system-level changes, and 31 changes in the physical environment. Examples of the PSE changes include: implementing smoke-free policies in apartment buildings, installing new bike racks, creating a farmers market and community gardens, shifting public engagement strategies to be more inclusive of diverse perspectives and community residents, and influencing how tribes across the state understand and articulate health equity.

Click here to view the aggregate REM report.

What are the implications of the REM findings for the HEiP initiative?

Findings from the REM discussions suggest that strategies related to stimulating new knowledge and awareness, engaging the community, and building coalitions and partnerships may be the first steps in laying the foundation for broader PSE change work. Building community relationships and establishing effective coalitions takes time and ongoing effort. Therefore, organizations interested in advancing health equity through their work will need to invest the staff time necessary for these critical first steps. Funders can support organizations in this work by providing longer-term funding to projects, setting reasonable timelines, and considering ways to support organizations to do more effective community engagement and coalition-building work.

How were the REM results used by HEiP-funded organizations?

Each HEiP-funded organization received a report that included a visual summary of their ripple effect map and description of the impacts that were shared by stakeholders. The reports categorize the various intended and unintended impacts of the HEiP initiative and the factors that support these impacts. From the perspective of Blue Cross, the maps help show the impact of the full HEiP initiative internally and with external stakeholders. Staff from HEiP-funded organizations reported using their REM report to inform their strategic planning, orient new staff members to the project, talk with donors and stakeholders about their work, and leverage new funds.

For more information
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Prepared by Wilder Research on behalf of the Center for Prevention at Blue Cross and Blue Shield of Minnesota.