The Wisconsin Early Childhood Obesity Prevention Initiative: An Example of Statewide Collective Impact

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ABSTRACT

Introduction: The Wisconsin Early Childhood Obesity Prevention Initiative (Initiative), established in 2007, seeks to address and prevent obesity in the early care and education system through nutrition and physical activity environmental and policy changes. The collaborative includes professionals from 3 state of Wisconsin Departments, the University of Wisconsin-Extension, the University of Wisconsin-Madison, and public health and early care and education organizations. This paper explores the efforts of the Initiative to advance our understanding of collective impact in practice and its value to health promotion efforts.

Methods: Evaluators conducted a mixed methods case study to evaluate the application of collective impact principles by the Initiative. This included a survey of Initiative partners, review of archival documents, and qualitative interviews with Initiative leaders.

Results: Initiative partners noted progress in establishing the conditions for collective impact. Archival documents and interviews describe both formal and informal practices that helped set a common agenda, align and coordinate partner activities, and promote communication among Initiative leaders. Results also detail the important current and potential roles of "backbone" staff from healthTIDE to support the Initiative. Additionally, results suggest particularly challenging aspects of the Initiative's impact model related to shared measurement and broader stakeholder communication. While the Initiative is still setting in place the conditions for collective impact, it has achieved significant policy, systems, and environment changes since its formation. Inclusion of nutrition and physical activity criteria in the state's quality rating improvement system for child care centers is one of its outcomes.

Conclusions: This case study offers several important insights about the application of collective impact in health promotion efforts, particularly in relation to the transition from previous collaborative activities, the value of establishing a clear common agenda among partners, the roles of backbone staff, and time and partner relationships in collective impact.

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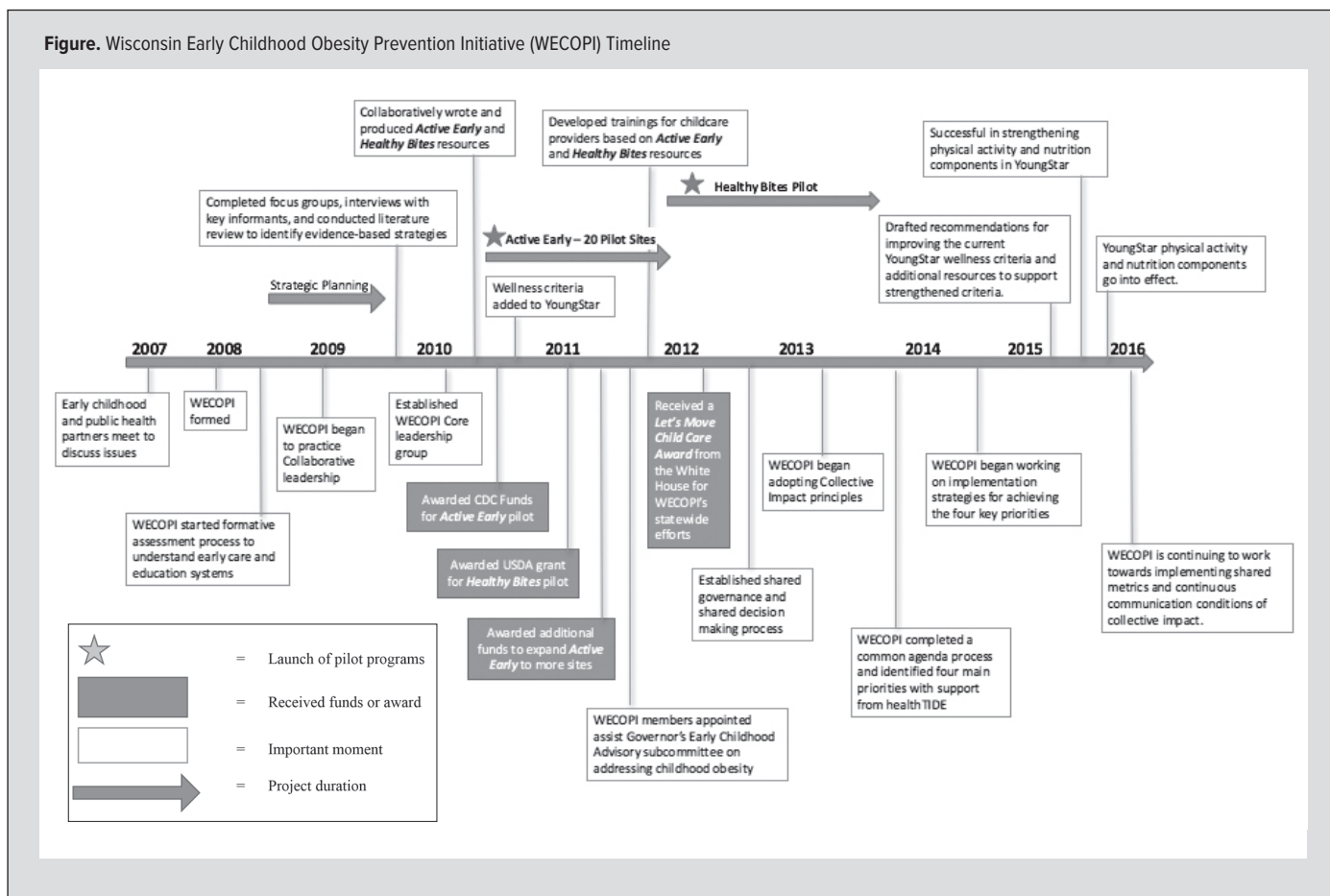
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INTRODUCTION

Childhood obesity is a complex issue requiring a multisystem approach. Systems affecting children include early care and education, schools, health care, and communities. Collective impact has been introduced as a framework for broad-sector collaboration across systems as a means for addressing complex social issues.[1] The early care and education system, specifically childcare centers, reach large numbers of children for prolonged periods of time each day.[2] More than 50% of children under age 5 with a mother working full-time spend over 35 hours per week in childcare.[3] Additionally, childcare providers have existing infrastructure for meeting the nutritional and activity needs of children.[4] This system, which may be enhanced to more effectively impact obesity, offers points for intervention as well.[5] Implementing wellness policies and training caregivers in best practices for physical activity and nutrition can promote healthy weight for young children in childcare settings.[6]

With 32% of 2- to 4-year-old children overweight or obese in Wisconsin,[7] representatives from multiple sectors have come together since 2008 to seize the opportunity for preventing childhood obesity presented by the early care and education system. This collaborative, the Wisconsin Early Childhood Obesity Prevention Initiative (Initiative), works to develop and implement interventions to improve nutrition and levels of physical activity among 0 to 5 year olds in Wisconsin, especially children served in childcare settings. Key partners in the collaborative include 3 state agencies (the Wisconsin Departments of Health Services, Public Instruction, and Children and Families); nonprofit organizations that support and advocate for early care providers and educators such as the Wisconsin Early Childhood Association and

Figure. Wisconsin Early Childhood Obesity Prevention Initiative (WECOPI) Timeline

Collaboratively wrote and produced *Active Early* and *Healthy Bites* resources

Developed trainings for childcare providers based on *Active Early* and *Healthy Bites* resources

Successful in strengthening physical activity and nutrition components in YoungStar

Completed focus groups, interviews with key informants, and conducted literature review to identify evidence-based strategies

Healthy Bites Pilot

Active Early – 20 Pilot Sites

Drafted recommendations for improving the current YoungStar wellness criteria and additional resources to support strengthened criteria.

YoungStar physical activity and nutrition components go into effect.

Strategic Planning

Wellness criteria added to YoungStar

2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016

Early childhood and public health partners meet to discuss issues

WECOPI formed

WECOPI began to practice Collaborative leadership

Established WECOPI Core leadership group

Received a *Let's Move Child Care Award* from the White House for WECOPI's statewide efforts

WECOPI began adopting Collective Impact principles

WECOPI began working on implementation strategies for achieving the four key priorities

WECOPI started formative assessment process to understand early care and education systems

Awarded CDC Funds for *Active Early* pilot

Awarded USDA grant for *Healthy Bites* pilot

Established shared governance and shared decision making process

WECOPI is continuing to work towards implementing shared metrics and continuous communication conditions of collective impact.

Awarded additional funds to expand *Active Early* to more sites

WECOPI completed a common agenda process and identified four main priorities with support from healthTIDE

WECOPI members appointed assist Governor's Early Childhood Advisory subcommittee on addressing childhood obesity

★ = Launch of pilot programs

▬ = Received funds or award

▢ = Important moment

➤ = Project duration

Supporting Families Together Association; and the University of Wisconsin-Extension and University of Wisconsin-Madison. The Initiative is supported by staff from healthTIDE, a "backbone" organization that supports efforts of several statewide groups seeking to address obesity and promote healthy living in multiple settings (eg, schools, food systems) through the use of collective impact.[8] The figure depicts the Initiative's historical evolution and notable impacts.

While the Initiative has always practiced shared leadership and governance, leaders saw the possibility for the collective impact approach[1] to build upon its existing practices in advantageous ways. In 2013, the Initiative began to take steps to integrate the conditions of collective impact into their work. These 5 conditions are a common agenda, mutually reinforcing activities, continuous communication, shared measurement systems, and backbone staff support. See Table 1 and Christens, et al, this issue for additional information on collective impact and its application to health promotion.[9]

Although collective impact has become an increasingly popular and utilized approach in health promotion,[10-12] there continues to be relatively few empirical studies of the application of the collective impact approach to coalition action, including the on-the-ground efforts required and implementation challenges. To this end, a case study of the Initiative was conducted to examine the utilization of the collective impact framework and consider how it may have influenced progress. Challenges experienced implementing the collective impact approach also are described.

METHODS

A case study was developed to understand evolution from a collaborative to a coalition using the collective impact framework and to measure qualitatively and quantitatively the impact of this change on the members and the function of the group. To develop this case study, evaluators from the Obesity Prevention Initiative (OPI) used a mixed methods design.[13] Case study research is valuable for answering questions of "how" and "why" and when understanding of real-life context is necessary for understanding a complex social phenomenon. To enhance empirical inquiry, case studies often draw upon multiple sources of evidence, including qualitative and quantitative data. As a well-established collaborative actively utilizing the collective impact framework and having experienced notable achievements (Figure 1), the Initiative was selected as a case for examining collective impact practices.

Qualitative data for the case study were drawn from the Initiative's archival documents,[14] emphasizing meeting minutes and participation records, both before and after the col-

Table 1. Examples of Collective Impact Practices in the Wisconsin Early Childhood Prevention Initiative (WECOPI)

Collective Impact Condition	Definition	Example from WECOPI
Common agenda	Partners have a shared vision for change, including a common understanding of the problem and approach for solving it.	Partners orient around a shared vision to prevent obesity and promote health in early childhood and develop four specific priority areas.
Mutually reinforcing activities	Alignment and coordination of partners' differentiated efforts towards achieving the common agenda.	Partners utilize a strategic planning process to detail activities and respective roles for each of the priority areas.
Continuous communication	Practices to insure regular and 2-way communication among partners that support shared understanding and trust.	Partners hold regular meetings and leaders communicate often through various means, including e-mails, telephone calls, and text messages.
Shared measurement systems	Collecting data and measuring progress consistently across partnering organizations on agreed upon indicators.	Partners discuss possible indicators for tracking progress, as well as potential challenges to address in developing a shared measurement system.
Backbone support	Staff outside of the collective impact partners that provide coordination, facilitation, and other logistical and administrative support.	Backbone staff from healthTIDE work to schedule meetings, facilitate group processes, provide collective impact resources, and assist in communication practices.

Table 2. Survey Responses of Partners Regarding Collective Impact Practices in the Wisconsin Early Childhood Prevention Initiative

Survey Item	% Agree	% Neither Agree nor Disagree	% Disagree
The convened group is committed to a common agenda. (Common agenda)	88	8	4
The convened group engages in mutually reinforcing and complementary activities. (Mutually reinforcing activities)	68	28	4
The convened group engages in continuous and effective communication. (Continuous communication)	68	24	8
The convened group uses shared measures to document and examine progress. (Shared measurement systems)	60	36	4
The convened group has the structural support to ensure effective collective work. (Backbone support)	72	20	8

lective impact framework was explicitly utilized. Evaluators also sampled a small group of active leaders, representing a range of roles, affiliations, and years of involvement, and conducted in-depth, semistructured individual interviews (n = 7).[15] These interviews were designed to elicit further qualitative data about the utilization of the conditions for collective impact and associated results. Quantitative data were drawn from respondents who noted involvement in the Initiative (n = 25) in a 2015 survey of healthTIDE stakeholders (n = 310). A set of 5 items asked respondents to rate their level of agreement (Agree, Neither Agree nor Disagree, or Disagree) with statements about collective impact practices. These data contribute the perspectives of the broader membership regarding the Initiative's progress toward its goals.

Qualitative data from the archival documents and interviews were analyzed deductively and inductively to identify themes and patterns.[16] Survey data were analyzed primarily with descriptive statistics. These quantitative and qualitative results were then analyzed in an integrated manner to look for triangulation and complementarity in the data sets, to expand on the understanding offered by either set alone, and to assure the legitimacy of the findings.[17]

RESULTS

Results are organized according to the 5 conditions of collective impact,[1] integrating the results from qualitative and quantitative

analyses. Results are summarized in Tables 1 and 2. Definitions of each of the 5 conditions also are provided in Table 1.

Common Agenda

Data show that the condition of common agenda, which requires all partners to develop a shared vision for change, has been achieved. Interviewees consistently described a common agenda for the Initiative's work, broadly describing a focus on preventing obesity and promoting health in early childhood and especially through intervention with early care and education providers. (See Box for information on the Initiative's priority areas.)

Interviewees reported that the Initiative had achieved this condition for collective impact through a process that was both deliberate and naturally emerging. In the survey, a high number of respondents (88%) also agreed to committing to a common agenda. A clearly stated and well understood common agenda assisted the Initiative in making decisions about new activities or grant opportunities to pursue, as well as in engaging other efforts and recruiting potential new members.

Mutually Reinforcing Activities

A majority of survey respondents (68%) agreed that partners engaged in mutually reinforcing activities. Evidence of mutually

reinforcing activities encouraged partners to recognize and apply their diverse strengths in coordination with one another towards achieving a common agenda. In particular, asset mapping and formative assessment conducted early in the Initiative's work was cited as helpful to build shared understanding of engaged stakeholders and their respective skills, resources, and connections (Figure).

Additionally, the process of writing, applying for, and implementing grants has encouraged clear definition of roles and responsibilities among partners. The diversity of the group with respect to both "big thinkers" and the "detail people" has helped to develop plans to achieve the common agenda that take advantage of "our knowledge and skill sets and who can do what."

Continuous Communication

From the archival documents and the accounts of interviewees, data show a strong commitment to the tenet of continuous communication, especially among the Initiative's core team. This team includes about 25 members who guide and carry out strategies to achieve the common agenda. As described for the 2 previous collective impact conditions, this was facilitated by both formal efforts and informal practices. The Initiative has established routines of preparing and distributing meeting agendas and notes and makes use of a cloud-based file sharing system to facilitate partners' access to a growing body of materials. Additionally, partners have committed to meeting regularly (every other month as a core team and 3 times a year for the full collaborative), using distance technology to facilitate virtual participation from partners across the state, and utilizing a portion of each meeting time to communicate updates on current activities and to discuss opportunities or challenges. Interviewees reported that the relationships and trust developed over the years among leaders support and complement this high level of communication.

Most survey respondents (68%) agreed that partners practiced continuous and effective communication. However, several interviewees noted that communication with the broader group's members (approximately 50 additional individuals) has been more challenging and needs improvement. Communication with the full membership has been less frequent and more one-way

in the form of sending announcements or other updates. One interviewee spoke to their aspirations and challenges:

> "We're trying to be transparent. We're trying to let everybody in the state know what's going on, but it's just tough to do and people can't be on all these [communications]. It just gets overwhelming."

Interviewees expressed hope that the backbone support offered may help achieve continuous communication with the full membership. Additionally, interviewees identified needed assistance in communicating with stakeholders beyond the collaborative, especially the families served by the early care and education system.

Shared Measurement Systems

Data indicate progress has been slow and challenging in establishing a shared measurement system. These systems identify progress indicators for collaborative work and consistently collect and review this data across partnering organizations to track progress, make adjustments as necessary, and hold partners accountable. Based on archival documents and interviews, focused work to develop shared measurement systems has begun only recently and interviewees noted this to be the most challenging of the conditions of collective impact to establish in their efforts. In comparison to the other collective impact conditions, fewer survey respondents (60%) agreed that the Initiative used shared measures to document and examine progress. Interviewees noted that partners individually collected and used data to support their own efforts, but coordination and sharing has generally occurred only when required by particular grants. In these cases, shared measurement was shaped around these grant requirements and not sustained afterwards. Additionally, the data often focused on deliverables and participant reach numbers rather than outcomes, limiting its utility.

While interviewees spoke of the value of shared measurement systems to their efforts today, they expressed uncertainty about which indicators would be most valuable to track and how to consistently collect and analyze data in a way that will be feasible and useful for the Initiative.

Support Staff from a Backbone Organization

The Initiative had a long history of shared leadership and distributed effort to support its operations, especially among core leaders. Since 2013 however, healthTIDE staff have provided explicit backbone support and eased some of the burdens of logistical coordination and process facilitation from the leaders. As mentioned previously, backbone staff have helped guide the Initiative through the process of agreeing on a common agenda and started a strategic planning process that includes efforts to detail mutually reinforcing activities, communicate more effectively to the network of partners and stakeholders, and make steps towards

shared measurement systems. Additionally, backbone staff provide general administrative support and seek out and connect new potential partners to the Initiative.

Interviewees described the backbone staff's efforts as highly valuable and they anticipate future benefits from their work going forward. Similarly, almost three-quarters of survey respondents (72%) agreed that the Initiative had well established structural support. One interviewee noted backbone staff "providing significant leadership to this group in terms of our vision work and our outcomes and measurements." Additionally, interviewees described other desires they thought the backbone staff could help meet, including assistance in conducting needs assessments and program evaluations, providing trainings in best practices for coalition action, facilitating grant writing processes, and advocacy and public messaging support.

DISCUSSION

This case study offers insights into long-term statewide coalition formation and the use of the collective impact framework. First, results demonstrate that a collaborative or an initiative does not need to start out operating under an explicit collective impact framework to achieve many of the conditions for collective impact and reap their benefits. The Initiative had successfully functioned for many years prior to formal utilization of the collective impact framework and demonstrated skill in shared leadership, role definition, resource and effort coordination, and internal communication, which carried over well in its shift towards the collective impact framework. Activities such as grant writing and partner relationship building may offer beneficial byproducts to developing the conditions for collective impact. Because many of these capacities had been developed prior to the Initiative's utilization of the collective impact framework, it is not possible to disentangle the specific effects of seeking to achieve those conditions. Furthermore, because the current analysis is organized around these 5 conditions of collective impact, many other facets of coalition functioning and success are not addressed in this report.

Nevertheless, the Initiative's case suggests that coming to an agreed upon and equally upheld common agenda is a valuable early focus in the process. Having consensus around a common agenda seems to ease the work of planning and implementing mutually reinforcing activities that will move towards shared goals, determining effective communication strategies for different subgroups of the collaborative, and helping the collaborative decide how best to respond to new opportunities or unanticipated challenges.

From this case study, insights were gained into the importance of "backbone" support to coalition initiatives. While the Initiative functioned well under a shared leadership model, the backbone support introduced by healthTIDE eased much of the burden from leaders around logistical coordination and group facilitation

and guidance. Moving forward, backbone staff may provide support in additional areas of need or particular challenge, including broad communication strategies, advocacy and public messaging, continuing to leverage funding for identified priorities, and shared measurement.

Finally, this case reminds us that any successful collaborative effort requires time to develop and depends on trusting relationships among partners (Figure). This is consistent with research on effective coalitions and collaborations.[18-20] While the collective impact framework does not speak directly to timelines or relationship development, it is clear that these are key ingredients to a worthwhile collective impact effort. Collaboratives seeking to build coalition capacity, regardless of the particular models they are using, should reserve time for the development of work and build in efforts to explicitly develop relationships among partners.

CONCLUSION

In this case study, the Initiative's implementation of the collective impact framework and impressions of progress within that implementation were examined. Partners in this work generally recognized progress in the Initiative's establishment of the conditions for collective impact. Data from interviewees and archival documents offered detail of how this progress has been made, including formal and informal efforts that have helped to establish these conditions. From the case study, important insights have been gained as to how coalition capacity is developed on the ground, including how prior efforts can beneficially carry over into the adoption of new frameworks, the importance of common agenda setting, and the varied catalyzing roles of a backbone staff. These findings will inform the Initiative's next steps as well as those of other collaboratives supported by healthTIDE. Additionally, these findings can inform future multisystem work.

REFERENCES

1. Kania J, Kramer M. Collective impact. *Stanford Soc Innovat Rev.* 2011; Winter:36-41.
2. Capizzano JA, Main R. *Many young children spend long hours in child care.* (Vol. 22). Urban Institute, Center on Labor, Human Services, and Population. Washington, DC; 2005.

3. Lyn R, Maalouf J, Evers S, Davis J, Griffin M. Nutrition and Physical Activity in Child Care Centers: the Impact of a Wellness Policy Initiative on Environment and Policy Assessment and Observation Outcomes, 2011. *Prev Chronic Dis.* 2013;10:120232.

4. Nader PR, Huang TT, Gahagan S, Kumanyika S, Hammond RA, Christoffel KK. Next steps in obesity prevention: altering early life systems to support healthy parents, infants, and toddlers. *Child Obes.* 2012;8(3):195-204.

5. Larson N, Ward DS, Neelon SB, Story M. What role can child-care settings play in obesity prevention? A review of the evidence and call for research efforts. *J Am Diet Assoc.* 2011;111(9):1343-1362.

6. Hood C, Martinez-Donate A, Meinen A. Promoting healthy food consumption: A review of state-level policies to improve access to fruits and vegetables. WMJ. 2012;111(6):283-288.

7. Wisconsin: State Nutrition, Physical Activity, and Obesity Profile 2016. National Center for Chronic Disease Prevention and Health Promotion; Division of Nutrition, Physical Activity, and Obesity; Centers for Disease Control and Prevention; Sept 2012. http://www.cdc.gov/nccdphp/dnpao/state-local-programs/profiles/pdfs/wisconsin-state-profile.pdf. Accessed Nov 20, 2016.

8. Adams A, Christens B, Meinen, A, et al. The Obesity Prevention Initiative: a statewide effort to improve child health in Wisconsin. *WMJ.* 2016(5):220-223.

9. Christens B, Tran Inzeo P, Meinen A, et al. Community-led collaborative action to prevent obesity. WMJ. 2016(5):259-263.

10. San Diego County Childhood Obesity Initiative. http://ourcommunityourkids.org. Accessed Oct 31, 2016.

11. Lets Go! Maine. The Barbara Bush Children's Hospital at Maine Medical Center. http://www.letsgo.org. Accessed Oct 31, 2016.

12. LiveWell Colorado. https://livewellcolorado.org. Accessed Oct 31, 2016.

13. Yin RK. *Case study research: Design and methods.* 5th ed. Thousand Oaks, CA: Sage; 2013.

14. Bowen GA. (2009). Document analysis as a qualitative research method. *Qualitative Res J.* 2009;9(2):27-40.

15. DiCicco-Bloom B, Crabtree BF. The qualitative research interview. *Med Educ.* 2006;40(4):314-321.

16. Fereday J, Muir-Cochrane E. Demonstrating rigor using thematic analysis: A hybrid approach of inductive and deductive coding and theme development. *Int J Qual Methods.* 2006;5(1):80-92.

17. Onwuegbuzie AJ, Teddlie C. A framework for analyzing data in mixed methods research. In: Tashakkori A, Teddlie C, eds. *Handbook of Mixed Methods in Social and Behavioral Research.* Thousand Oaks, CA: Sage; 2003:351-383.

18. Lasker RD, Weiss ES. Creating partnership synergy: the critical role of community stakeholders. *J Health Hum Serv Adm.* 2003;26(1):119-139.

19. Butterfoss F, M Kegler. Toward a comprehensive understanding of community coalitions: Moving from practice to theory. In DiClemente R, Crosby R, Kegler M, eds, *Emerging theories in health promotion practice and research.* San Francisco: Jossey-Bass. 2002:157-193.

20. Foster-Fishman P, Berkowitz S, Lounsbury D, Jacobson S, Allen N. Building collaborative capacity in community coalitions: A review and integrative framework. *Am J Community Psychol.* 2001;29(2):241-261.

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