Action-Learning Collaboratives as a Platform for Community-Based Participatory Research to Advance Obesity Prevention

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Abstract: Although process elements that define community-based participatory research (CBPR) are well articulated and provide guidance for bringing together researchers and communities, additional models to implement CBPR are needed. One potential model for implementing and monitoring CBPR is Action Learning Collaboratives (ALCs); short term, team-based learning processes that are grounded in quality improvement. Since 2010, the Prevention Research Center at Dartmouth (PRCD) has used ALCs with three communities as a platform to design, implement and evaluate CBPR. The first ALC provided an opportunity for academia and community leadership to strengthen their relationships and knowledge of respective assets through design and evaluation of community-based QI projects. Building on this work, we jointly designed and are implementing a second ALC, a cross-community research project focused on obesity prevention in vulnerable populations. An enhanced community capacity now exists to support CBPR activities with a high degree of sophistication and decreased reliance on external facilitation.

Key words: Community-based participatory research, action-learning, action-learning collaboratives, obesity, prevention research centers, nutrition, physical activity.

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Community-based participatory research (CBPR) is an approach to research that combines “knowledge and action for social change to improve community health.” The process and steps in CBPR are “intended to bring together researchers and communities to establish trust, share power, foster co-learning, enhance strengths and resources” and “build capacity” so that community needs and health problems can be examined and addressed. Although the process elements that define CBPR are well articulated and provide some guidance for how to “bring together researchers and communities,” additional models to support CBPR implementation and use of evidence-based practices in this type of research and ongoing assessment are needed.

One potential model for systematically actualizing and monitoring CBPR is Action Learning Collaboratives (ALCs); short term (12 month), team-based learning collaboratives that are grounded by the principles and practice of quality improvement (QI). Action Learning Collaboratives apply an action-learning process in which multiple teams with a shared aim, work together over a fixed period of time using QI tools and methods to bring about organizational or systemic change. Action Learning Collaboratives have been implemented mostly in healthcare settings and are modeled on the Institute of Medicine’s Breakthrough Series Collaborative.

In healthcare settings, ALCs bring together multiple healthcare teams in an experiential and iterative process to learn to apply evidence-based practices within their local clinical contexts. Large ALCs in healthcare that have consistently produced improved health outcomes include the Northern New England Cardiovascular Study Group, a regional network of medical centers formed to improve outcomes in cardiac care, and the Cystic Fibrosis Foundation Learning and Leadership Collaborative, a national collaborative of cystic fibrosis care centers formed to improve survival and health status of persons with cystic fibrosis.

Although ALCs have been used mostly in healthcare settings, studies from other areas have shown them to be an effective platform for diverse teams to systematically address complex systemic and organizational problems within educational settings, businesses, and most recently public health. ALCs have also been successfully implemented to address specific public health issues such as HIV AIDS, healthy foods for children, and childhood obesity.

In this paper we describe how we used the ALC approach to build community and an academic institution’s capacity to undertake CBPR. We report initial findings and lessons learned from our first ALC (ALC One) and then describe how we further adapted the ALC model to serve as a platform for cross-community based participatory research (ALC Two). Lastly, we provide recommendations for using ALCs as a method for academics, community residents, and organizational leaders to promote CBPR and evidence-based obesity prevention through a structured QI approach.

Background

The Prevention Research Center at Dartmouth College (PRCD), which began in 2009 with funding from the Centers for Disease Control and Prevention, includes a partnership of academic and community leaders from three different communities—a city and small-town in New Hampshire (Manchester and Keene) and a small, rural town...
in Vermont (St. Johnsbury). This partnership was formed because the strategic vision of the PRCD (to improve the cardiovascular health of the residents of New Hampshire and Vermont) aligned well with the mission and vision of each community’s health promoting initiatives. In addition, community leadership hoped that aligning their work more closely with academia would “improve our ability to disseminate our work regionally/nationally, possibly provide higher level funding opportunities to support priority community needs and increase our capacity for evaluation of our public health efforts.” (Community Leader, Manchester)

During the past two years (2010–2012) the PRCD and our partner communities adapted the Institute for Health Care Improvement’s Collaborative Model for Achieving Breakthrough Improvement as the model for the development of two ALC cycles (ALC One and Two). We envisioned the ALC approach as a platform for bringing academia and communities together to develop, design, implement, and study the CBPR process in relation to population health improvement efforts. Similar to the Breakthrough Series Collaborative, our ALCs were short term (12–15 months), team-based collaborative learning systems (all team members are teachers and learners) that were grounded by the principles and practice of QI. Unlike the Breakthrough Series Collaborative, we worked with a small number of teams drawn from community organizations (vs. just hospitals or clinics) and allowed teams to self-select the “global and specific aims” of their improvement work (vs. being provided a pre-determined focus).

Major components of our ALC approach include: 1) development of community teams appropriate to address the issue of interest (i.e., heart health and obesity), 2) baseline assessment of each community’s heart health, 3) review of the evidence about how to address the problem, 4) joint design of an intervention using a QI process (e.g., Plan, Do, Study, Act cycles), 5) implementation of learning sessions in which the principles and tools of QI are taught and practiced, 6) coaching during action periods between the learning sessions as the teams apply their interventions, 7) iterative and on-going evaluation of the ALC and QI process and progress, and 8) reframing of the intervention/approach at the community level based on an iterative evaluation. Below we describe the specific methods and results of these two ALCs designed to reduce heart health risks in our three partner communities.

**Methods ALC One**

From February 2010 to February 2011 the PRCD embarked on its first ALC (ALC One) which was designed to address two goals. Goal one was to provide a structured process for Dartmouth academics and public health community leaders from three partner communities to engage with each other in an effort to improve each community’s health. Goal two was to provide the community leaders and community teams a methodology for implementing structured community-based interventions through a QI process designed and implemented in partnership with academic researchers. The QI projects designed by each community focused on heart health and were of strategic importance to each community. Figure 1 illustrates the structure of this first ALC approach. Dartmouth College’s Committee for the Protection of Human Subjects approved the protocol.
The three community teams and Dartmouth faculty worked together over a year during four ALC learning sessions, monthly coaching calls and three action periods to: 1) select a problem from each community related to a heart health risk factor important to their residents and organizations, 2) identify evidence to address the problem, 3) develop a QI plan to address the problem, and 4) apply the plan to improve a community process, practice or system. Dartmouth faculty served as the lead teachers. The cost for the learning sessions, travel and faculty time were all covered through The Prevention Research Center at Dartmouth College. Communities each received $5,000 to help cover materials and expenses related to their project. Figure 2 illustrates the process and timeline for the ALC.

In between learning sessions, the community teams implemented their projects and evaluated progress by collecting process and intermediate outcome measures. Coaching was provided to the leaders of each team by Dartmouth faculty through monthly phone meetings and through quarterly in-person guidance provided at community team meetings. Additional technical assistance, such as survey development and IRB clearance for individual community efforts, was provided by Dartmouth faculty and staff.

A mixed methods evaluation of the ALC process and outcomes was conducted by outside evaluators from the Center for Program Design and Evaluation at Dartmouth using a combination of questionnaires, semi-structured interviews and observation of trainings at learning sessions.

**Results ALC One**

Results from ALC One showed that the ALC approach can be adopted and implemented by community-based teams and outcomes of their improvement work can be systematically measured and evaluated. The specific improvement projects that were implemented through ALC One included establishment of a community supported agriculture relationship and improvement of worksite vending options (St. Johnsbury), a walkability assessment of a city census track with recommendations for city planners (Manchester), and the creation of an evidence-supported blood pressure wallet card that is now widely used in the community (Keene). Table 1 provides details on
Figure 2. ALC One-components and timeline
<table>
<thead>
<tr>
<th>Community Site &amp; Teams</th>
<th>Global Aim &amp; Pre Work</th>
<th>Specific Aims</th>
<th>Changes, Measures, Methods</th>
<th>Primary Results (Feb 2011)</th>
</tr>
</thead>
<tbody>
<tr>
<td>KEENE, NH</td>
<td></td>
<td></td>
<td></td>
<td>Surveyed 30 doctors and 40 nurses, 73% response rate (22 doctors, 37 nurses)</td>
</tr>
<tr>
<td>Local Guiding Partner:</td>
<td></td>
<td></td>
<td></td>
<td>• Found consistency across doctor and nurse responses.</td>
</tr>
<tr>
<td>The Council for a Healthier Community</td>
<td></td>
<td></td>
<td></td>
<td>• Lifestyle factors contributing most to uncontrolled BP: inadequate physical activity (76%), excessive weight (69%), unhealthy diet (47%).</td>
</tr>
<tr>
<td>Team Members:</td>
<td></td>
<td></td>
<td></td>
<td>• Top barriers to BP control were patients’: lack of understanding (66%), medication non-compliance (64%), lack of concern about health implications of high BP (47%).</td>
</tr>
<tr>
<td>n=11 (4 Core)</td>
<td></td>
<td></td>
<td></td>
<td>• Most promising resources identified for high BP control were community-based: nutrition and exercise programs (56%), best practice messaging (53%), lifestyle modification coaching (46%), practice messaging (53%), lifestyle modification coaching (46%).</td>
</tr>
<tr>
<td>Team Member Organizations:</td>
<td></td>
<td></td>
<td></td>
<td>Final analysis of pilot data for 50 participants:</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>• Most people accepted the card (98%) and many (71%) were optimistic that it might help them improve health.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>• Most returned with the card over three visits up to one month apart (76% at third assessment).</td>
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<tr>
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<td>By the 3rd contact more than half (51%) had made some positive change in lifestyle, a majority (56%) had shared the card, and nearly half (46%) believed the card would help them to communicate with their provider.</td>
</tr>
</tbody>
</table>

(Continued on p. 67)
<table>
<thead>
<tr>
<th>Community Site &amp; Teams</th>
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</tr>
</thead>
<tbody>
<tr>
<td>TEAM</td>
<td>GLOBAL AIM</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
| MANCHESTER, NH         | We aim to create health-promoting neighborhoods that support positive health behaviors among residents, such as physical activity. | • Directly engage neighborhood residents in the identification and selection of solutions to address priority neighborhood concerns that are necessary for improving walkability and livability. | CHANGE ONE
| Local Guiding Coalition: Manchester HEAL Policy Committee | PREWORK Geocoded coronary heart disease (CHD) mortality at a Census Tract level to highlight neighborhood variation in rates and determine potential reasons for this variation. Utilized regression analysis methods to explore neighborhood poverty (or deprivation) and its influence on higher rates of CHD mortality. 70% of the variation in CHD mortality between low deprivation areas and high deprivation areas was associated with neighborhood poverty. This work was conducted in partnership with the NH Environmental Public Health Tracking Program at the State's Division of Public Health Services. | • Enact policy, systems, and environmental change in the built environmental as a means to create safe neighborhoods that support physical activity as a part of everyday life. | Conducted 40 surveys in the neighborhood area (door-to-door and at community events), and frequently met with two neighborhood watch groups in the area. |
| TEAM Members n=14 (4 core) |                                      |              |                             | 65% of residents do not feel safe walking in their neighborhood at night. |
| Team Members Organizations: |                                      |              |                             | 1 out of every 3 residents disagrees with the statement "People in my neighborhood usually help each other out". |
| • Manchester Health Department |                                      |              |                             | Top Concerns: No safe places for children to play, offer more free programs for children in the summertime, recreation. |
| • City Highway Department |                                      |              |                             | Solutions: Nearly 40% of residents indicated that they would like to see the parks and playgrounds in the neighborhood cleaned up and the overall safety of these spaces improved. |
| • City Planning Department |                                      |              |                             | Created a written plan (includes budget estimates) for how to improve a local neighborhood park through environmental change strategies based on community input from the survey tool findings and community meetings. |
| • City Parks and Recreation Division |                                      |              |                             | Utilized written plan to identify several environmental change strategies for implementation: |
| • City Police Department |                                      |              |                             | • Entryway landscaping |
| • Regional Planning Commission |                                      |              |                             | • Pathway surface repairs |
| • Health Care Providers |                                      |              |                             | • Upgraded lighting |
| • Social Service Providers |                                      |              |                             | • Constructed a central Ramada area |
| • Manchester Residents |          |              |                             | • Installed new seating (benches and picnic table area) |

(Continued on p. 68)
ST JOHNSBURY, VT
Local Guiding Coalition: Fit and Healthy Coalition
Team Members: n=7 (5 Core)
Team Member Organizations:
1. NVRH, VT Blueprint for Health
2. NVRH Occupational Medicine
3. NVRH Community Health Team
4. Green Mountain United Way
5. VT Department of Health (3 members)

GLOBAL AIM
We aim to improve the heart health of all employees working at Weidmann by improving nutrition behaviors.

PREWORK
Identified Weidmann as a good partner in the CBPR process because of their worksite wellness programs and new energized Wellness Committee. Researched evidence-based work site wellness initiatives for physical activity and nutrition. Weidmann FG data (2009) suggested employee interest in onsite access to local produce, having more healthy choices in vending machines, high level of readiness to improve health habits.

Changes, Measures, Methods

CHANGE ONE: Vending Machines
Measures
Increase from baseline of 10% the percent of healthy choices and decrease the percent of unhealthy choices for vending machine food.
Methods
Pre, post inventory counts.

CHANGE TWO: CSA
Measures
Increase consumption of, and satisfaction with, produce purchased from the local CSA.
Methods
Participation Counts, Post Survey

CHANGE THREE: Quick Learning Sessions
Measures
Employee participation in quick learning sessions.
Methods
Participation Counts

Primary Results (Feb 2011)
Baseline:
March 2010: 10% of vending machine food choices are healthy (9 out of 96 items).
January 2011:
6% of vending machine food choices are healthy (6 out of 104), thus a decrease in healthy food options.

45 Participants in CSA
Post Survey: 26 respondents. Of these respondents:
• 69% said they made healthy changes in their diet.
• 38% said they made other healthy lifestyle changes.
• 96% said the quality of food at the CSA was excellent or good.
• 79% (n=197) Weidmann employees participated in learning sessions.
• Out of the 197 participants, 65% (n=127) participated in 3 or more sessions.
• 32% (n=62) of participants responded to post survey with 93% (n=57) reporting they made a positive change in eating habits.

Note:
1. Health Policy Committee: Manchester Healthy Eating Active Living (HEAL) Innovation Fund Project has been supported through grant funding provided by the HNH Foundation and the National Convergence Partnership. The project has two main goals: (1.) create safe neighborhoods that support physical activity as part of everyday life, and (2.) ensure that fresh, local, and healthy food is available and affordable in all neighborhoods.
2. Weidmann: Weidmann Electrical Technologies, Inc. is an international manufacturer of electrical insulation for transformers. The St. Johnsbury plant employees about 250 workers, 76% males, three shifts.
3. The vending machine initiative did not stick. The truck drivers did not follow the request for healthy food and just put in whatever they had in the truck. The hospital had a similar problem with the one food vending machine in their facility- same vendor. Hospital thus adopted a vending machine policy and kept after the vendor to follow it. Eventually the hospital had a better selection of healthy options. The ALC team suggested before, during, and after the initiative that Weidmann adopt a vending machine policy.

NVRH=North Eastern Vermont Regional Hospital
CSA=Community Supported Agriculture
each community’s: team, global and specific aims, changes, measures, methods, and preliminary results for each project.

In addition to the QI project results reported in Table 1, process evaluation measures revealed ongoing collaboration between the communities and academic center through the ALC. Learning sessions were attended by core team members from each community team (n = 13 core members plus 15 community members). Core members had organizational support and permission to use their work time for ALC educational sessions. Our expectation was that the core members would attend all four ALC learning sessions and participation at these sessions was 86%. Coaching calls were attended by at least one ALC team member from each community and by Dartmouth faculty. All three communities and Dartmouth coaching faculty were represented on these monthly calls 96% of the time. In surveys, community teams ranked Dartmouth as doing “very” to “extremely” well in engaging in “open, frank discussions,” supporting their work in the community, and being “reliable” and following through. In surveys and semi-structured interviews, other items in ALC One that were particularly valued by the community teams included: 1) increased community capacity, 2) increased QI technical knowledge and application related to the selected community projects and new projects, and 3) learning from colleagues in other communities.

Increased Community Capacity

Individuals who participated in their community ALC team strengthened their relationships with each other and their commitment to the project. Results from confidential team member surveys showed that individual team members rated their teams as doing “extremely” well in “promoting equitable partnerships,” “fostering collaboration,” “communicating effectively,” and “bringing together diverse stakeholders.”

Increased QI and CBPR Technical Knowledge and Application

Through the implementation of ALC One, communities were introduced to typical tools and methods of improvement science and CBPR. Confidential team member surveys revealed that methods or tools that were used “most often” included the Plan, Do, Study, Act (PDSA) process (QI), the “ramp of improvement” (QI), and concepts from CBPR. Periodic semi-structured interviews with team leaders also revealed that team members have used the QI process or tools for new, non-ALC community projects indicating its spread.

Learning from Colleagues

By learning and working together in the ALC, the three communities developed trusting relationships and started to share knowledge and expertise, as well as resources to address local issues, particularly through the learning sessions and coaching sessions. They also developed a common language and process (QI) for examining local issues. These relationships and shared language facilitated the subsequent joint planning and implementation of ALC Two (described below) across the three communities.
Challenges

One of the major challenges of our first ALC work was that each community team had its own aim and unique project. This limited the collaborative learning that could happen on any one of the community issues and communication between the communities outside of the learning sessions or coaching calls (i.e., survey results indicated that cross-community teams almost never communicated with each other outside of these times). At the same time, the different issues being addressed by each team led to team compositions with varying degrees of expertise within and between teams. This diversity created challenges for the faculty who needed to plan educational sessions that were meaningful to all participants. Lastly, while the Dartmouth faculty wanted to honor the values of CBPR within the structure of the ALC process this created tension between the communities and Dartmouth because being adaptive is difficult within a uniform learning and implementation process.

Building on the lessons learned and the educational grounding provided through ALC One, Dartmouth faculty and the three partner communities agreed to use an ALC approach as a platform for a joint research project, the InSHAPE Together project. This second ALC (ALC Two), which is ongoing, builds on lessons and skills learned through ALC One. For example Dartmouth faculty and its community partners have agreed to: 1) create a shared aim and focus across the three communities, 2) empower community leaders to drive the implementation of the project in their own communities, and 3) use the ALC model as the primary method to engage community members in the community-based participatory research process and project.

Methods ALC Two

In ALC Two the communities and Dartmouth jointly developed and implemented the InSHAPE Together research project [InSHAPE Together is an adaptation of InSHAPE® (Self Health Action Plan for Empowerment) originally developed as a community-supported health promotion program for adults with serious mental illness]. The overall aim of InSHAPE Together is to address two root causes of obesity, i.e., being physically inactive and not consuming a healthy diet. While Dartmouth faculty partnered with community leadership in the design of this research project, and will continue to take the lead on the overall evaluation of the research; the community leaders are driving the local ALC process. Figure 3 illustrates the ALC Two model.

This ongoing study is a cross case and within case study using a mixed methods approach over nine months at each of the three sites with thirty participants recruited.
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at each site. The overarching goal of InSHAPE Together is to increase physical activity and improve nutrition of at-risk individuals through the establishment of realistic and time-framed health goals and the development of a process for meeting these goals at the individual, team, and community level.

A mixed methods evaluation of the ALC Two process and outcomes is focused on both the higher level partnership between communities and Dartmouth to plan and implement the overall project as well as on each community’s local level implementation, process and outcomes. Evaluators from the Center for Program Design and Evaluation at Dartmouth are using a combination of participant baseline, mid- and end-of-project measures (e.g., weight and height), questionnaires, semi-structured interviews and observation of trainings at learning sessions to evaluate project outcomes. Dartmouth College’s Committee for the Protection of Human Subjects approved the protocol.

Target Population

Thirty participants were drawn from a locale within each community as defined by community public health experts based on “best fit” for project scope, including synergy with local population health improvement work, and greatest community need and interest (e.g., local residents of a specific neighborhood). Eligible participants were selected from the community pool based on the following criteria: 1) residents of the community between twelve and 85 years of age, 2) inactive or low activity by CDC standards for engagement in physical activities, and 3) agreed to work to improve their physical activity and nutrition through the ALC process which requires team work and an interest in also improving the community norms for physical activity.

Each ALC is being further divided into multiple teams, either predetermined through recruitment as a team in the community or through activities conducted in the first ALC meeting to assign individuals to teams. Team Leaders will be identified to assist in organizing the teams in between ALC learning sessions (during action periods) and to assist project personnel in tracking process measures (e.g., frequency of team meetings, development of team goals, and collection of team level data). ALC One community team members serve as the lead faculty and coordinators of ALC Two. Local nutritionists and fitness experts have been hired as coaches and local residents have been trained to collect the baseline, mid- and end-of-project assessments in partnership with the evaluation team from Dartmouth.

Core Components

The core components of InSHAPE Together taken from the ALC One model include learning sessions, action periods, coaching, individual level assessments and data collection and monitoring. Each component is described in detail in Box 1.

As with ALC One, ALC Two engages participants in a collaborative QI process as a way to address low physical activity or poor nutritional choices. This process includes: 1) setting individual, team, and community goals, 2) learning about evidence for achieving these goals, 3) planning an approach to meeting these goals (intervention and measures), 4) doing the activity as planned, and tracking, monitoring and assess-
Box 1.
CORE PROJECT COMPONENTS AND DESCRIPTION OF PROJECT COMPONENTS

<table>
<thead>
<tr>
<th>Core Project Components</th>
<th>Description of Project Components</th>
</tr>
</thead>
<tbody>
<tr>
<td>Learning Sessions</td>
<td>ALCs meet monthly to engage in a process for identifying, monitoring, and assessing fitness and nutrition goals as a community, team, and individual. These learning sessions are designed by community leaders and support personnel with assistance from Dartmouth faculty.</td>
</tr>
<tr>
<td>Action Periods</td>
<td>The time between Action Learning Collaboratives (ALC) learning sessions is defined as “action periods”. Teams meet at least one time a week during action periods to support individuals in achieving their improvement goals. The nutrition and fitness experts mentor and coach individuals and teams in meeting their goals and in learning how to support each other to meet goals.</td>
</tr>
<tr>
<td>Coaching</td>
<td>A fitness expert and a nutrition expert attend each ALC learning session and are available to each team between ALC sessions to provide education and support.</td>
</tr>
<tr>
<td>Individual-level assessments</td>
<td>Physical fitness, Body Mass Index, and physical activity and nutrition behaviors of participants are assessed three times (baseline, mid, end).</td>
</tr>
<tr>
<td>Data collection and monitoring</td>
<td>During the course of the project, participants monitor and report in some consistent manner an individual-level measure of physical activity and nutrition (e.g., number of minutes spent walking per day).</td>
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</table>

Preliminary Results—ALC Two

While there are no final participant outcomes to report on ALC Two, the higher level ALC process for InSHAPE Together led to the following results:

- Over the course of the last year PRCD faculty and community leaders from Manchester, Keene and St. Johnsbury have jointly developed the intervention design, curriculum and measures for InSHAPE Together. A number of the curriculum
Figure 4. ALC Two—INSHAPE Together Project Design
elements and interactive tools stemmed from those used in the first ALC cycle (ALC One).

- Participation in planning meetings and phone calls by community leaders and Dartmouth lead faculty stands at 97% as of December, 2012, indicating a high degree of collaboration on the project.
- Each community has successfully built a locally-based implementation and research team, recruited participants, collected baseline data and started the ALC process, which is ongoing.
- During the design phase of this work, we negotiated lead roles for community leaders and residents, and clarified Dartmouth faculty roles. Confidential, semi-structured interviews conducted in November with community leaders suggest that the collaborative process is working. Leaders have shared that the “exchange of ideas around InSHAPE Together honored community participation” and that “a model of collective ownership has evolved.”
- We adapted the ALC One model to accommodate the research initiative of InSHAPE Together assuring that all aspects of the learning sessions, coaching, and evaluations would be participant-centered and accomplished based on participant level of need and capacity.
- Evaluation of the process and outcomes of the research is on-going and supported by locally-based research team members recruited by ALC One community leaders.

Discussion

Results of our study suggest that ALCs can facilitate CBPR by providing a model that guides and structures the collaboration of academics and community leaders in conducting research at the local level. When applied across multiple communities, the ALC approach helps to link communities with each other so that shared interests and enhanced capacity to solve entrenched public health problems is developed. Box 2 summarizes how our two ALC models promote the principles, values, and process of CBPR.

Conclusion

Community-based participatory research supported by an ALC platform creates the infrastructure for collaboration and shared decision making needed to address population health issues such as obesity. Using an ALC approach for working with community partners on projects that address community identified needs has allowed the PRCD faculty and community leaders to develop trusting relationships while growing our joint capacity and understanding of CBPR. The ALC approach and implementation created the space for sustained learning by faculty and communities thus promoting the development of enhanced community capacity at our three community sites to support local CBPR activities with a high degree of sophistication and an ever smaller reliance on external facilitation.
## CBPR PRINCIPLES AND ALCS

<table>
<thead>
<tr>
<th>CBPR Principles</th>
<th>ALC One</th>
<th>ALC Two</th>
</tr>
</thead>
<tbody>
<tr>
<td>Recognize community as a unit of identity</td>
<td>Community leaders were directly engaged by PRCD faculty to work collaboratively within the ALC approach.</td>
<td>Community residents were directly engaged by Community leaders and PRCD faculty to work collaboratively within the ALC approach.</td>
</tr>
<tr>
<td>Build on strengths and resources within the community</td>
<td>PRCD faculty provided knowledge of QI methods and tools, and community leaders provided context (i.e. political, social, etc.) to the application of QI methods and tools at the local level.</td>
<td>In addition to what was cited in ALC One, community residents may provide practicality to the application of QI methods and tools in everyday life.</td>
</tr>
<tr>
<td>Facilitate collaborative, equitable partnership in all phases of the research</td>
<td>The ALC approach strengthened partnerships between academia and local public health practice by providing bidirectional learning opportunities.</td>
<td>The ALC approach strengthens relationships between public health and community residents by providing bidirectional learning opportunities.</td>
</tr>
<tr>
<td>Promotes co-learning and capacity building among all partners.</td>
<td>The ALC approach can be replicated in other community-based projects.</td>
<td>The ALC approach enables community residents to utilize methods and tools in other facets of their lives beyond the InShape Together project</td>
</tr>
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<table>
<thead>
<tr>
<th>CBPR Principles</th>
<th>ALC One</th>
<th>ALC Two</th>
</tr>
</thead>
<tbody>
<tr>
<td>Emphasize local relevance of public health problems and ecological perspectives</td>
<td>Heart health-related problem identification was community controlled and allowed for contextual factors and nuances.</td>
<td>Community residents will identify physical activity and nutrition goals at the individual, team, and community level. Community level goals will focus on policy and environmental changes needed to support healthy eating and active living. Topics for the ALC learning sessions will be adapted based on community residents’ needs and interests. ALC members have planned for the joint development of publications as well as grants to sustain and expand the ALC process in each community based on local evidence of what works best under what circumstances.</td>
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<td>that recognize and attend to the multiple determinants of health and disease</td>
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<tr>
<td>Involve systems development through a cyclical and interactive process</td>
<td>The ALC learning sessions provided a forum for “practicing” methods and tools on real community projects.</td>
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<tr>
<td>Disseminate findings and knowledge gained to all partners and involves all</td>
<td>Dartmouth faculty and community leadership jointly developed an Abstract and summary of the ALC One process and results and presented our findings at the national PRC conference in 2011 in Atlanta.</td>
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<td>partners in the disseminating process</td>
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CBPR=Community-Based Participatory Research  
ALC=Action Learning Collaboratives  
PRCD=Prevention Research Center at Dartmouth  
QI=Quality Improvement
Acknowledgments

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Notes


