Research Article

A Systematic Approach to Process Evaluation in the Central Oklahoma Turning Point (COTP) Partnership

Eleni L. Tolma, Marshall K. Cheney, David D. Chrislip, Derek Blankenship, Pam Troup, and Neil Hann

ABSTRACT

Background: *Formation is an important stage of partnership development.* ***Purpose:*** *To describe the systematic approach to process evaluation of a Turning Point initiative in central Oklahoma during the formation stage. The nine-month collaborative effort aimed to develop an action plan to promote health.* ***Methods:*** *A sound planning framework was used in the design of a systematic approach to process evaluation. Mixed (qualitative and quantitative) methodology was used, including stakeholder interviews, surveys, and attendance logs.* ***Results:*** *Reach to the meetings ranged from 38% to 70%. "Collaboration membership" was statistically significantly associated with high attendance at the meetings. Strengths of the collaborative process included stakeholder diversity, a strong organizational structure and the use of a democratic collaborative process.* ***Discussion:*** *Building effective collaborative skills among the stakeholders early in the planning phase can be instrumental in promoting participation during the formation stage. In addition, emphasis should be given in strengthening/supporting of the coalition processes, coalition structures, leadership and staff.* ***Translation to Health Education Practice:*** *Process evaluation is a valuable tool for the continuous monitoring of the quality of the collaborative process during the formation stage, and therefore, minimum process evaluation measures should be incorporated at the early stages of the partnership development.*

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BACKGROUND

Process evaluation is defined as the measurements obtained during the implementation of a project in order to "control, assure or improve the quality of performance of delivery."[1] Through the collection of both qualitative and quantitative data, evaluators can provide continuous feedback to the program implementers and assist them in modifying components of the intervention to continually enhance its quality.[2] In the area of partnership and coalition development, most process evaluation is conducted in the form of a monitoring system that tracks both process measures (e.g., member participation, planning products, media coverage, meetings, budget allocations) and intermediate measures, such as community actions, delivery and ratings of satisfaction with the collaborative process. Moreover, most of the process evaluation is conducted during the implementation and maintenance stage.[3] However, a community partnership goes through other important stages in its development, such as pre-formation and formation.[4]

The pre-formation stage includes identifying potential members to recruit, conducting a needs assessment, and collecting surveillance data. The formation stage involves clarifying issues, recruiting mem-

Eleni L. Tolma is an associate professor in the Department of Health Promotion Sciences, University of Oklahoma Health Sciences Center, Oklahoma City, OK 73190; E-mail: elenitolma@ouhsc.edu. Marshall K. Cheney is a chief of Program Development at the Oklahoma City County Health Department, Oklahoma City, OK 73105. David D. Chrislip is a senior fellow at the Kansas Leadership Center, Wichita, KS 67202. Derek Blankenship is the director of Biostatistics at the Baylor Health Care System, Dallas, TX 75206. Pam Troup is an executive director at Healthfirst Operations, SSM Health Care System, Oklahoma City, OK 73106. Neil Hann is a chief of the Community Development Service at the Oklahoma State Department of Health, Oklahoma City, OK 73117.

bers, formalizing rules and procedures, developing policy and procedure manuals, clearly defining roles and expectations from members, developing written goals and objectives, and developing an action plan and mission statement.[4,5] Formation has been defined as the "initial building of the coalition as an organization."[6] During formation key leaders and staff develop structures and operating procedures, build strong relationships and trust among the stakeholders, and conduct assessment and planning that will lead to the implementation of effective functioning of the coalition.[7]

Despite the importance of the formation stage, few studies have incorporated process evaluation in the initial formation of a public health community collaboration.[7-9] Historically, little emphasis has been given to evaluation as resources are more likely to be spent on interventions that are visible to stakeholders.[10] Consequently, this study describes the first application of a *systematic* process evaluation of a partnership during the formation stage. Evaluation is usually viewed by stakeholders as costly and time-consuming, and it often ends up being a "do-it-yourself" model.[11] This study is significant because it can help other practitioners and researchers involved in partnership and coalition development (especially partnerships still in the planning or formation stage) further appreciate the importance of process evaluation during all phases of partnership development, and will assist them in the planning and implementation of process evaluation.

PURPOSE

The overall aim of this evaluation study was to monitor the collaborative process of developing an action plan for the improvement of the health status of central Oklahomans through the Central Oklahoma Turning Point (COTP) initiative, by answering the evaluation questions posed by the advisory committee and assessing if the meeting objectives were met. Process evaluation was conducted by utilizing a participatory action research approach.[12] Participatory evaluation, a form of participatory action research, is a partnership approach to evaluation that engages the community stakeholders as co-researchers in all aspects of the evaluation design, implementation and interpretation of the results.[13] Evaluators and community participants work collaboratively to define outcomes and measures as well as collect process and outcome data, and analyze findings. Decision making is a joint responsibility between the evaluator and the lay participants throughout the evaluation, although the level of participation of different stakeholders may differ at various stages in the evaluation. For instance, in this study the stakeholder-members of the evaluation team were primarily engaged in the design of the process evaluation and interpretation of interim results.

METHODS

Description of the Collaborative Process and a Historical Perspective

Oklahoma has consistently ranked toward the bottom of national health rankings.[14] Despite efforts to reverse these trends during the 1980s and the 1990s, Oklahoma's health status indicators failed to improve. Therefore, the local and state public health officials decided to rethink the delivery of public health by emphasizing the use of state and local collaborative partnerships in order to identify intervention priorities from community partners. Turning Point, a program funded by The Robert Wood Johnson Foundation and the W.K. Kellogg Foundation, facilitated this new approach. There are currently 66 partnerships in Oklahoma based on the Turning Point philosophy, which are in varying degrees of development. The collaborative work of these partnerships has resulted in the development of various health promotion initiatives and sustained community system changes.[15]

The COTP initiative was launched by a group of community leaders to identify and prioritize the health problems in central Oklahoma and ultimately create an action plan to address these issues. During the pre-formation stage of the partnership, 208 stakeholders were recruited. During the planning process, the stakeholders met twice a month for approximately nine months beginning September 2003 to May 2004. A total of 14 meetings took place. All meetings took place in the evening. The collaborative process was divided into four main phases: understanding challenges and current reality regarding health in Oklahoma; defining a vision of health in Oklahoma and key performance areas (areas in which high performance is essential in order to achieve the vision); defining strategies; and moving to action. The evaluators systematically shared the evaluation results at the end of each meeting and each collaborative phase with the steering committee and the stakeholders via oral reports and newsletters. This evaluation study was approved by the University of Oklahoma Health Sciences Center Institutional Review Board.

Planning of the Evaluation Process

The primary planning framework suggested by Steckler and Linnan[2] was used in the design of the process evaluation. The framework describes a systematic approach to process evaluation by providing definitions of key process evaluation components and key steps in designing and implementing effective process evaluation efforts. The key process evaluation components include context, reach, dose delivered, dose received, fidelity of the intervention, and implementation.

The secondary guiding framework used was the Community Health Governance (CHG) model by Lasker and Weiss.[16] The CHG model hypothesizes that leadership and management influence the success of the collaborative process by determining who is involved in the process, how participants are involved and the scope of the process. These process characteristics, in turn, determine the extent to which collaboration can achieve the three proximal outcomes of collaboration, (i.e., individual empowerment, bridging social ties and synergy), and thus attain the distal outcomes of the collaboration (i.e., strengthening community problem-solving and improving community health). The CHG model can help the evaluators ask the right research questions pertaining to each component such as what the role of leadership is in the collaborative

process, how the stakeholders are involved in the process, what the scope of the partnership is, and how the collaborative process affects the stakeholders. By answering these questions, the evaluation team can provide feedback to the management and leadership of the coalition and make the necessary changes that will lead to a more effective collaborative process. A stronger collaborative process will further strengthen the problem-solving ability of the community members and ultimately improve the community's health. A visual representation of the model can be found in Figure 1.

A process evaluation component matrix was developed that listed each component of process evaluation dimensions and related questions to be evaluated and how each dimension would be measured (Table 1). The evaluation team consisted of seven members including the lead facilitator, representatives of the broader stakeholder community, and members of the steering committee. Additional information about the planning of the process evaluation can be found elsewhere.[17]

Data Collection and Measurement

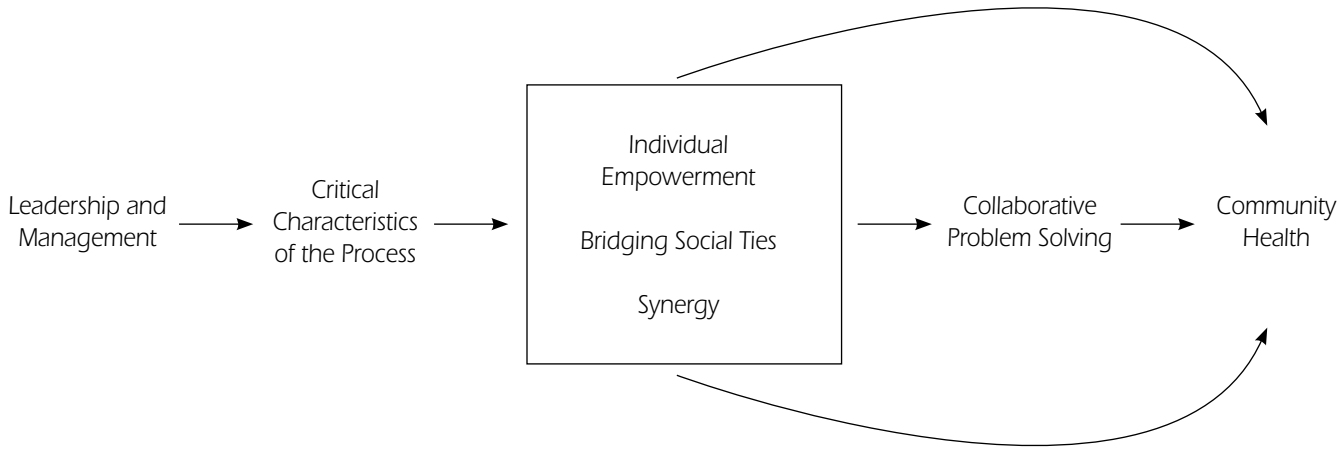
This evaluation employed both qualitative and quantitative methodology. Regarding quantitative research, the primary data collection tool was the *Working Together-Profile of Collaboration Survey* (PCS).[18] The PCS consists of 40 statements accompanied by a five-point Likert-type response scale ranging from "strongly disagree" (code 1) to "strongly agree" (code 5). This stakeholder satisfaction survey has established validity and reliability and has been administered to at least 23 collaborative groups prior to this study. Authorization to use the tool was given by its developers.[18] The PCS consists of five scales. Table 2 provides the definition of the constructs, the number of items, a representative item, and the Cronbach alpha for each scale. Cronbach alpha varied from 0.65 to 0.86, which signifies an overall reliable instrument.

The PCS was self-administered at three data collection points (i.e., T1-beginning, T2-midpoint and T3-end of the collaborative process) and study participants were unidentifiable. Participant demographic information was collected only during the last data collection point.

Regarding qualitative research, two rounds of individual semi-structured interviews were conducted with stakeholders. The first round took place approximately one-third of the way through the collaborative process. Fourteen interviews were conducted. The method of participant selection was stratified random sampling to ensure that minority populations were well represented, and that a variety of opinions were expressed based on the degree of involvement of each stakeholder. In addition, stratified random sampling increased the credibility of the selection process and reduced suspicion about why certain stakeholders were selected for the interviews.[19]

The participants were divided into two main categories: Caucasians and others, that is participants representing the major ethnic minorities in Oklahoma (African Americans, Hispanic, American Indians and Asian/Pacific Islanders). Within each category, the participants were further divided into three sub-categories based on their level of participation for the first part of the planning process, that is, frequent attendees (i.e., attended the first meeting and missed two or fewer meetings), average attendees (i.e., attended the first meeting and missed three meetings) and rare attendees (i.e., attended the first meeting and missed four or more meetings). Each participant was assigned a number. Three participants were randomly selected from each category. Among the 18 participants asked to be interviewed, 14 agreed, representing stakeholders in each sub-category. The second round of interviews took place at the end of the collaborative process. Ten interviews were conducted

Figure 1. Model of Community Health Governance (CHG)



SOURCE: From Lasker RD, Weiss ES. Broadening participation in community problem solving: a multidisciplinary model to support collaborative practice and research. *J Urban Health*. 2003;80(1):14-47. Reprinted with permission from the editor of Journal of Urban Health.

Table 1. Process Evaluation Component Matrix

Component & Definition[1]	What will be evaluated/Related research questions	How will be measured
Context (Aspects of the larger social, political, and economic environment that may have influenced intervention implementation.)	A) Meeting facility accessibility B) Overall collaborative atmosphere C) Quality of meeting facilities D) Visibility of COTP/How much COTP was exposed to the media? E) Community readiness	A: Stakeholder Interview (SI) B: Interactive Group Evaluation Form (IGEF), Observation Form (OF), Profile of Collaboration Survey (PCS), Steering Committee Feedback (SCF) C: IGEF, SI, SCF D: Media logs E. PCS
Recruitment (Procedures used to approach and attract participants.)	A) Visibility of COTP B) What motivated stakeholders to participate in the first place?	A: Event logs, Media logs B: SI
Reach (Proportion of intended target audience that participated in an intervention.)	A) Percent of intended stakeholders who participated in each meeting B) Percent of intended stakeholders who participated in each meeting based on race/ethnicity and affiliation	A & B: A sign-up sheet was used for every meeting. A data-base stakeholder descriptive was used to identify group representation
Dose delivered (Number or amount of intended units of each intervention or each component delivered or provided.)	A) Number of meetings that took place B) Length of meetings C) Content/topics covered in each meeting	A & B: Agendas, OF C: Facilitator check-off list, OF
Dose received (Extent to which participants actively engaged with, interacted with, were receptive to, and/or used materials or recommended resources.)	A) New knowledge and skills gained by stakeholders B) Meeting Objectives achieved/ Did the participants reach a consensus (in each meeting) if that was the intent of the meeting? C) How well did the participants work in their working groups?	A: SI B: Random Electronic Survey (RES), OF C: OF, SI
Fidelity (Extent to which the intervention was delivered as planned.)	A) Did collaboration process take place as planned (meetings, content, objectives)? B) Are we staying true to the process and principles of working together?	A & B: Review of original plan of meetings, agendas, sign-up sheets , IGEF, OF,SI
Barriers (Problems encountered in reaching participants)	Why do people quit coming to the meetings?	SI
Maintenance/Retention (Keeping participants involved in the programmatic and data collection)	A) What do we do to keep participants involved? B) What makes people keep coming to the meetings? C) What do we do that gets people to each meeting?	A & C: Staff Interview B: SI .

[1]Steckler A, Linnan L, eds. *Process evaluation for public health intervention and research*. San Francisco: Jossey-Boss; 2002.

Table 2. Description and reliability of Profile of Collaboration Survey

Construct (survey items)	Definition	Representative item	Cronbach alpha (Published)[2]	Cronbach alpha (Calculated)
Context of Collaboration (1-3)	The degree of readiness of the collaborative group in terms of perceived needs, leadership, and capacity to undertake this collaborative effort	Now is a good time to address the issues about which we are collaborating	0.46	0.65
Structure of Collaboration (4-15)	The design of collaboration in terms of membership, communication methods, and overall organization	We have adequate staff assistance to plan and administer the collaborative effort	0.77	0.73
Collaboration members (16-23)	The members' skills and attitudes toward working together on this process	Stakeholders are effective liaisons between the organizations and the group	0.87	0.83
Collaboration process (24-34)	The process that is being used to reach decisions	Stakeholders have an effective decision making process	0.85	0.86
Results of the Collaboration (35-40)	The results that are being accomplished due to the collaborative process	Stakeholders have concrete, measurable goals to judge the success of the collaboration	0.80	0.75

[2] Chrislip, D. D., & Larson, C. E. (1994). *Collaborative leadership: How citizens and civic leaders can make a difference*. San Francisco, CA: Jossey-Bass.

using the same method of selection as the first round but with a modified definition of meeting attendance. There was representation in all but one category, the one of "others-average." In addition, seven steering committee members, one staff person and two facilitators were interviewed.

All interviews were done face-to-face except for one, which was done over the phone. Each interview lasted approximately 30 minutes. The interviews were conducted by three interviewers who were previously trained in qualitative research. The three interviewers also worked together on analyzing the data collected.

Other measurement tools used to monitor the quality of each meeting included attendance and media monitoring logs, the Interactive Group Evaluation Form, the Facilitator Checkoff List, the Random Electronic Survey and the Meeting Observation Form.[20] The Meeting Observation Form consisted primarily of 30 items, each of which was measured by an individual five-point Likert-type scale with endpoints "not at all" to "greater extent" and assessed the quality of the meeting regarding the following aspects: (1) Design of the meeting; (2) Disciplinary content (i.e., whether the participants were able to understand the important ideas presented in the session); (3) Implementation of the meeting; (4) Participant behavior; and (5) Culture / Equity. The attendance monitoring logs were used to monitor who participated in the meetings, his/her racial/ethnic background as well as his/her professional affiliation. The media monitoring logs were used to monitor the exposure of COTP during this planning process and they were completed by a professional media consultant who was also a COTP stakeholder. The Interactive Group Evaluation Form was given at the end of each meeting to each task group with the aim to solicit answers to two basic evaluation questions: (1) What helped make this meeting work? and (2) What should be changed to make this meeting better? The Random Electronic Survey, which was developed by the evaluation advisory committee, was sent electronically to a random sample of meeting attendees the day after the meeting. Its purpose was to assess whether all of the intended meeting objectives were achieved through consensus by the end of each meeting. Finally, the Facilitator Checkoff List was filled out at the end of the meeting by the lead facilitator who indicated (from a scale of 0 to 3, with 3 being completely covered) the degree to which he had covered the topics or objectives of the meeting.

Data Analysis

The quantitative data analysis consisted primarily of descriptive statistics for data collected during all collection points. Advanced stage statistics (i.e., bivariate and

multivariate analyses) were only conducted for the data collected during the last data collection point in order to answer the question "What makes people keep coming back to the meetings?" Bivariate analysis was used to test the association between PCS variables and demographic variables. Logistic regression was used to assess the relationship between meeting attendance and possible covariates. For the analysis, attendance was dichotomized into those who attended six or fewer meetings as opposed to those who attended more than six meetings. The possible covariates included demographic and summary collaboration variables. Summary collaboration variables were created by calculating the mean response of each individual for the five collaboration categories. The logistic regression was conducted in a manual stepwise fashion. The variables were added to the model one by one to determine if they were associated with attendance using an alpha of 0.05. If they did not meet the criterion they were dropped from the model and the next variable was assessed. Variables not in the final model were also assessed as possible confounders. Microsoft Excel was used for data entry and conducting the descriptive statistics during the first and second data collection points. SAS version 9.1 was used for the advanced statistical analysis.[21]

Regarding qualitative research, the interviews were transcribed by a staff member. One of the evaluators re-listened to each tape while reading the respective transcript and verified that the transcript provided truly represented the discussion; if necessary, each transcription was edited. Two evaluators and one staff member who had been trained in qualitative data analysis coded the transcriptions independently. Once the coding was completed, each coder grouped similar codes together in order to identify major themes or concepts.[22] The coders then compared their results in order to reach a consensus and identify important themes across all participants. Themes were said to be related and important if they were mentioned more than once by at least half of all the interviewees.

RESULTS

Attendance, Racial/Ethnic Representation and Stakeholder Affiliation Representation

Of 208 invitees, 146 stakeholders attended the first meeting. Attendance declined over the next meetings (the lowest attendance was 74) and leveled off by the fifth meeting to reach an average of 99 participants in each meeting. Throughout the meetings, Caucasian attendance exceeded 70% and African American attendance was approximately 15%. Hispanic representation was approximately equal to their representation in the population residing in Oklahoma, particularly after the mid-point of the collaborative process with percentages above 5%. On the other hand, American Indians and Asian/Pacific Islanders were underrepresented throughout the collaborative process. Stakeholders from the health sector were the predominant group represented throughout the collaborative process (i.e. their representation ranged from 25% to 35% based on the time of the assessment), followed by those representing the business (15 % to 20%), education (10% to 14%), and governmental sectors (8% to 12%), followed by youth (3% to 5%), and finally those who were underserved or disadvantaged citizens such as homeless (2%). Reach (i.e., the proportion of the participants who attended each meeting in relation to the number of those invited) ranged from 38% to 70% with an average of 47% throughout the collaborative process.

Working Together-Profile of Collaboration Survey

Results by PCS scale showed that among all scales there were no meaningful differences in the mean scores during the three data collection points ($N = 62$ for T1, $N = 64$ for T2 and $N = 87$ for T3). For instance, in regards to the "Structure of Collaboration" construct, the mean scores (in a scale of 1-5) at the three data collection points were 4.03, 4.07 and 4.06 at T1 (beginning), T2 (mid-point), and T3 (end-point) respectively. Similar patterns were observed in regards to the other scales. Overall, the "Context of Collaboration" scale received the highest mean score for all three assessments (4.56), followed by "Structure of Collaboration" (4.05), "Collaboration Process" (4.0), "Collaboration Members" (3. 91), and "Results of Collaboration" (3.81). The statements "The stakeholder membership includes those affected by the issue" and "The stakeholder membership is not dominated by any group or sector" received the lowest means scores (3.30 and 3.60 respectively). On the other hand, the statements that received the highest mean scores were "Now is a good time to address the issues about which we are collaborating" and "The situation is critical so we must act now" (4.68 and 4.60 respectively).

Additional descriptive information was obtained during the last data collection point. Fifty-one percent of the stakeholders were female; with the majority (70 %) being 45-84 years old followed by 28% at 25-44 years old and only 2% under 25 years old. The majority of the stakeholders were Caucasian (62%) followed by 12% African American, 4% American Indian, 2% Hispanic, and 2% Asian/Pacific Islanders. The majority of the participants participated in more than 10 meetings (61%), 24% participated in 7-9 meetings and 15% participated in less than six meetings.

The results of the bivariate analysis did not show any statistically significant association between the PCS variables and any of the demographic variables. Moreover, logistic regression indicated that the construct "Collaboration Membership" was the only PCS variable associated with attendance with an odds ratio of 3.35 (95% CI = 1.08, 10.37, $P = 0.035$). In other words, the odds of having high attendance (7-13 meetings) are 3.35 times greater for every one point increase in the rating of collaboration membership.

Semi-structured Interviews

Twenty-four stakeholders participated to the one-on-one interviews. Of those, 54% were Caucasians and the rest represented the major ethnic minorities of Oklahoma (i.e., African American, American Indian and Hispanic). Moreover, 41% of the inter-

viewees were characterized as frequent, 25% as average and 34% as rare attendees.

Stakeholders overall felt very positive about their experience with the collaborative process. Some reasons for this positive experience include the opportunity to listen to different individuals' opinions, the stakeholders' involvement in a diverse group of individuals, the anticipation that this process would lead to a positive result, the opportunity to contribute to a discussion, the well-structured collaborative process, and the respect the individuals extended to each other. When asked about the strengths of the collaborative process, diversity of stakeholders was an overarching theme. Diversity referred to culture, background and career fields.

Interviewees also noted as strengths the well-planned meetings, the structured process of the collaborative initiative, the skilled facilitation of the meetings, the open communication lines and meaningful dialogue among the stakeholders, the dedication of the staff to this process, and the effective leadership of COTP. On the other hand, the interviewees perceived as weaknesses the length of the meetings (three hours long), the length of the collaborative process (nine months), the under-representation of all community groups, including the ethnic/minority populations and low-income populations, and the lack of professional facilitators within each task group.

When stakeholders were asked how the collaborative process affected them, some stakeholders stated that through this collaborative process they gained greater knowledge regarding the health issues in Oklahoma and expanded their networking. Others said that the process helped them improve their listening skills and become more sensitive and tolerant to others' points of view. For others, the collaborative process gave them a chance to express themselves and share their opinions. Moreover, during the second round of interviewing, a few stakeholders also stated that by participating in this process they became more health conscious in regards to their eating and exercising habits.

When stakeholders were asked what motivated them to come back to the meetings, they acknowledged that the severity of the public health issues in Oklahoma as well as their personal commitment to this process were the primary reasons for their continued interest in the process. Others also felt that the process was productive and moved the group toward achieving project goals. Stakeholders also reported the reasons that made them initially participate in the collaborative process, including a personal invitation to participate by someone they knew and highly respected, the magnitude of the effort itself in terms of bringing such a large number of stakeholders together, and the leadership of the COTP creating an atmosphere where stakeholders felt equal to each other.

Leadership was a subject that received special attention during the second round of interviews. Most of the interviewees described the characteristics of good leadership as someone being energetic, respected by the community, passionate, humble, and committed to the collaborative process. The majority of the interviewees identified the two co-chairs as the leaders; however, the steering committee, the main facilitator, and the group task facilitator were also identified as leaders. The interviewees praised the fact the steering committee was able to facilitate this collaborative process by providing the necessary resources and without influencing the stakeholder decision-making process.

During the last phases of the collaborative process (i.e., defining strategies, and moving to action), the stakeholders spent most of their time working in their assigned task groups. All of the participants enjoyed working in the task groups. Some of the challenges the stakeholders faced included the need for additional meetings outside of those regularly scheduled and the need to conduct research on workgroup topics, which felt overwhelming for some. More staff support was suggested to conduct background research for group members and support workgroup activities.

As said earlier, seven steering committee members, one staff person and two facilitators were also interviewed. Some important recommendations given by the interviewees to better enhance the collaborative process included the re-definition of the role of the co-chairs of the steering committee (i.e., to oversee the whole process rather than conduct group facilitation), the need for continuous recruitment for new members and leaders, the development of a repository of information (gathered by the members of the task groups) that can be used for research, and the identification of a permanent structure in terms of staff and office location for COTP.

Meeting Observations

Both of the evaluators were present at the meetings; their role was to observe and rate the quality of the collaboration among stakeholders during each meeting.With the use of the Meeting Observation Form, the overall mean scores for all 14 meetings, on a scale of 1-5 (with 5 indicating the highest quality) are the following: Design of the meeting (4.82), Disciplinary content (4.88), Implementation of the meeting (4.89), Participant Behavior (4.70), and Culture and Equity (4.90). The evaluators' also noted on the logs that the stakeholders seemed to enjoy engaging in networking before the beginning of the meeting. During the task group discussions the observers noted that the facilitator encouraged open participation and paraphrased when necessary. The stakeholders were attentive, asked questions and were well-engaged in the discussions that were taking place. A summary of all the results in relation to each research question can be found in Table 3.

DISCUSSION

The purpose of this evaluation study was to monitor the process of developing an action plan toward the improvement of the health status of central Oklahomans through the COTP, by answering the evaluation questions posed by the advisory committee and assessing whether the meeting objectives were met. Process evaluation reports at the end of each meeting and interim reports at the end of each collaborative phase were

provided to the steering committee and the lead facilitator as well as all the stakeholders via a newsletter. The steering committee and the lead facilitator used the results to enhance the quality of the collaborative process, and keep stakeholders engaged in the process. The fact that an action plan (the outcome of this planning process) is in place and currently in use by COTP is an indication of the emphasis that was given by the leadership in assuring a strong formation stage. Ultimately, a comprehensive and an in-depth evaluation process contributed to strengthening and promoting the sustainability of this partnership.

Undoubtedly, stakeholder participation in community partnerships is important in building capacity and promoting sustainability of the partnership.[11] One of the main findings of this study was that reach in terms of attendance was relatively low (~50%) ranging from 37% to 70%. Similar results were obtained in another community-based intervention, during which reach ranged from 43% to 100%.[23] Reach was also weak in terms of racial/ethnic and career background representation. These findings were not surprising. Difficulties in the recruitment, reach, and retention of a diverse group of stakeholders in community-based interventions have been noted in the literature.[7] One way to overcome this weakness is to incorporate stakeholders representing various segments of the population in the steering committee so that they not only contribute to the implementation of tasks already placed on the agenda, but also contribute to the setting of the agenda.[9] The importance of stakeholder diversity was highlighted through qualitative research since diversity was identified by stakeholders as both a strength and a weakness of the collaborative process. As a strength, diversity was defined in terms of race/ethnicity and career background. As a weakness, diversity was defined by underrepresentation of lower socioeconomic strata and the business sector. Kreuter et al.[4] also noted that coalitions sometimes focus on descriptive representation in terms of social/demographic characteristics where the members selected have little accountability to their groups, in contrast to substantive representation.

This study also provided some insights as to why stakeholders initially participated in the process. The majority of the interviewees indicated that the main reason they initially participated in the partnership was a personal invitation by someone they knew and highly respected, or as one stakeholder said "the right person asked me to." Therefore, from a practitioner's perspective, it is important during the recruitment phase that key people in the community (i.e., respected individuals with high visibility) *personally* invite the stakeholders rather than delegate the role to the staff.

Participants also provided answers as to what can be done to sustain their participation. One reason noted by the majority of the stakeholders regarding their continuous participation was the *commitment* the stakeholders felt to the collaborative process. As practitioners, we need to identify ways to keep the stakeholders committed to and involved in collaborative partnerships. One way to strengthen the stakeholders' commitment is by assigning them specific tasks/roles during the assessment of the health issues as well as the identification of solutions. For instance, in this project, the stakeholders were assigned to small task groups. Recent research has shown that working in small groups and having a stable group of core members has been a characteristic of successful partnerships.[24] In this study, we went one step further to identify what would enhance working relationships within these small groups. Some of the results include meeting structure and good facilitation, effective communication among stakeholders, as well as diversity in group membership.

In addition, the finding that the collaboration membership was the *only* variable associated with high stakeholder attendance corroborates other research that documents the importance of building strong collaborative skills among the stakeholders.[4, 24, 25] Organizers need to provide training to stakeholders on collaborative skills not only at the onset of the partnership development, but also throughout the process in order to further strengthen stakeholder commitment. Other strategies to promote continuous participation include the strengthening of the coalition processes and the building up of the coalition structure. Literature also suggests that stakeholders who perceive more benefits than costs are more likely to stay committed and continue to be involved with the partnership.[26, 27]

Another interesting finding derived from the quantitative research was that community readiness was the one aspect of the collaborative process during the administration of the PCS that consistently received the highest score. This is not surprising because the PCS was administered during the early stage of the partnership. When the motivation to develop a partnership comes in response to some pressing issues, in this case the poor health status of Oklahoma, then community ownership is enhanced and there is greater likelihood that the partnership will be sustained.[27] Practitioners who are considering launching a community partnership should first assess the community's readiness before implementing such a project.

Moreover, the importance of leadership in successful partnerships has been highlighted in this study as well as in the literature.[4,24,28] Effective leadership has been characterized as *collaborative* leadership, the one that effectively facilitates productive interactions among partners, by bridging diverse cultures, sharing power, facilitating open dialogues, and resolving conflicts.[28]

The whole planning collaborative process was an educational and liberating process for the stakeholders through building critical consciousness.[29,30] The stakeholders were able to examine in-depth the health issues of Oklahoma that affected their lives, reflect upon those issues, engage in an authentic dialogue, and suggest plans of action or solutions to the identified issues. The process evaluation revealed evidence of this liberation process. For instance, during the first round of interviews, the participants acknowledged that the planning process helped them realize the magnitude of the health issues in Oklahoma, and identify the root causes of bad health. Participants

Table 3. Summary of the Results of Process Evaluation

Research Question	Results
1. What motivated stakeholders to participate in the first place?	▪ Personal invitation by someone they knew and highly respected ▪ The magnitude of the effort of bringing a large number of stakeholders together ▪ Leadership of the Central Oklahoma Turning Point (COTP) ▪ Community readiness to undertake this project
2. What makes stakeholders keep coming back to the meetings?	▪ Commitment felt by the stakeholders to the collaborative process ▪ Severity of public health issues in Oklahoma ▪ Productive meetings ▪ Curiosity what the outcome would be ▪ Enhanced collaborative skills
3. What do we do to keep stakeholders involved in this process?	▪ Enhanced communication system (e.g. use of internet) ▪ Strong organizational structure (e.g. skilled facilitation, participatory nature of meetings, productive meetings, open communication channels) ▪ Democratic collaborative process based on the principles of respect and fairness ▪ Incentives (e.g. health screenings and opportunities for networking and education)
4. Have the meeting objectives been achieved?	▪ More than two-thirds of the respondents of the Electronic Random Survey in each meeting agreed that the objectives for each meeting were achieved
5. Has a concrete plan of action been achieved?	▪ A report was developed which outlined the stakeholders' findings and the nine strategies to improve the health in Central Oklahoma region
6. Did the stakeholders reach a consensus if that was the intent of the meeting?	▪ Based on the Electronic Random Survey results consensus was consistently achieved
7. Are we staying true to the process and principles of working together?	▪ Based on the Electronic Random Survey results, stakeholder interviews and observations by the evaluators it was confirmed that the stakeholders followed the principles of working together
8. Have all the meetings taken place as planned and has the content of each meeting been covered?	▪ All meetings took place as planned ▪ All topics of each meeting were covered based on the Facilitator Checkoff List

9. What are the strengths and weaknesses of the collaborative process?	▪ Strengths:
	  ▪ Diversity (race/ethnicity and career background)
	  ▪ Well-planned meetings
	  ▪ The structured process of the collaborative initiative
	  ▪ The skilled facilitation of the meetings by the lead facilitator
	  ▪ The open communication lines and meaningful dialogue among the stakeholders
	  ▪ The dedication of the staff to this process
	  ▪ The effective leadership of COTP
	▪ Weaknesses:
	  ▪ Diversity (not having enough representatives from lower socioeconomic strata or representatives from the business sector)
	  ▪ The length of the meetings (three hours long)
	  ▪ The length of the collaborative process (nine months)
	  ▪ The lack of professional facilitators within each task group

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Table 3. Summary of the Results of Process Evaluation (Con't)

Research Question	Results
What role did leadership play in this collaborative process?	▪ Strength of this collaborative process ▪ Provided necessary resources without influencing decision-making process

What contributed to the cohesiveness or lack of cohesiveness of each working committee?	▪ Cohesiveness:
	  ▪ The need to achieve a common goal
	  ▪ The topic assigned was specific
	  ▪ The discussions took place within an environment of respect
	  ▪ The process was structured and had good facilitation
	  ▪ The use of e-mail as an effective method of communication among the stakeholders
	▪ Lack of cohesiveness
	  ▪ The topic was too broad to be examined in-depth
	  ▪ The core task group consisted of a small number of individuals with limited expertise and skills
	  ▪ The lack of a professionally trained facilitator

Why people quit coming to the meetings?	▪ Personal conflicts ▪ Commitments to other events
How much was COTP exposed in the media?	▪ Continuous coverage throughout the collaborative process ▪ Highest coverage in September (launching of COTP), December (Polling, Town Hall meetings and "listening sessions"), and June (announcement of recommendations and action plan)

also mentioned how they have engaged in a meaningful dialogue, during which they felt their voices were heard, and that they felt equal to each other. During the second round of interviews we observed not only a change in their awareness regarding the health issues in Oklahoma, but also a personal behavioral change toward healthier habits. These results indicate an accomplishment of empowerment at least on an individual basis.

From a methodological perspective, a major strength of this study was the achievement of triangulation, which increased the accuracy and credibility of our findings. Triangulation was achieved by using a variety of data sources (surveys, observations, interviews), by incorporating a broad-based evaluation team, and by combining mixed methodology.[31] For example, the underrepresentation of stakeholders from ethnic minority groups and other disadvantaged groups was identified as a theme throughout the evaluation through various sources, such as individual interviews with stakeholders, attendance monitoring logs and the results obtained through the PCS administration. Triangulation can be expensive and time consuming; however, it is imperative that researchers try to achieve triangulation despite budget, time or political constraints.[19]

Another methodological strength was the use of participatory evaluation. Various benefits are associated with participatory evaluation. The most prominent ones include building the community's capacity to conduct their own systematic data collection and enhance their understanding of evaluation. These strengths can lead to the application of evaluation methods in their own projects with appropriate training, facilitation and technical assistance. In addition, the experiential wisdom of community leadership can ensure that evaluation questions are important, data collection methods are realistic and findings are relevant and applicable within the local cultural context.[13] In this study, the stakeholder-members of the evaluation team provided invaluable insights as to what to evaluate, how to evaluate it, how to interpret the results and how to disseminate them. For example, the question in the interview guide concerning the cohesiveness or lack of cohesiveness of the task group in which the stakeholders belonged to was proposed by the community stakeholders. In addition, it was the stakeholders who suggested and designed the use of the Random Electronic Survey as a way to assess whether the objectives set for each meeting were actually accomplished.

Moreover, the use of a systematic comprehensive approach to evaluation based on the evaluation framework developed by Steckler and Linnan[2] as well as the theoretical framework of the Community Health Governance model by Lasker and Weiss[16] were instrumental in the success of this model. The first model helped us to operationalize the concept of process evaluation (e.g., reach, dose delivered/received, fidelity), and the second one to identify the specific aspects related to collaborative work such as leadership and management. The results of this study showed that strong leadership

and management are important factors to reach (at least) the proximal outcomes of collaboration such as individual empowerment or bridging social ties.

On the other hand, there were also some methodological weaknesses. One challenge encountered during the process evaluation related to the administration of the PCS. During the three data collection points, not all participants were the same at each time of the data collection and moreover, the participants consisted of a convenience sample and not of a random sample as may be expected in a trend longitudinal study.[32] Although this might seem as a limitation of the study, one has to keep in mind that it was impossible to have control over who participated in the research study since the evaluators had no control over who attended the meetings. Stakeholders were volunteers who donated their personal time after regular work hours to attend these meetings. This meant that evaluators needed to be respectful of the stakeholders' time and of the fact that they were probably mentally and physically tired by the time they conducted the evaluation survey (i.e., the PCS) at the end of the meeting. To enhance completion of the survey, the time needed to complete the PCS was kept to less than 10 minutes.

The lack of meaningful differences in the mean scores for each PCS scale during its administration at three different points of time might suggest that the tool was not sensitive enough to measure how the stakeholders truly felt about the collaborative process. Despite this limitation, the results of the PCS have served as a "snapshot" at three different points of time of how the stakeholders felt about the collaborative process. Evaluators working in the area of community development need to be aware of these methodological limitations and if possible be knowledgeable of the principles of community organization and development prior to engaging in such a project. Rigorous evaluation methods may be difficult to implement because community work is a heuristic process. Community-based research is *action-research* and innovative approaches often need to be taken. Stakeholders might not be interested in research and traditional instruments might not be conducive to achieving the goals of the collaboration.

TRANSLATION TO HEALTH PROMOTION PRACTICE

There are numerous recommendations that can be derived from this study; however, we will focus on the following that we consider as the main ones:

• *Diversity* (in terms of ethnicity, background and demographics) was identified as a major strength as well as a weakness. Therefore, more effort should be given in encouraging ethnic minority populations to engage in the collaborative process. Other community groups that can be characterized as powerless or marginalized but primarily affected by the health problems, such as youth or homeless people, should also be encouraged to participate. Moreover, diversity within the coalition membership needs to be continually monitored and if necessary, the leaders of the coalition enhance their efforts of recruitment.

• Coalitions need to continue promoting stakeholder participation and commitment by engaging all stakeholders actively not only in the implementation of the action plan, but also in the development of the action plan, through an open dialogue and based on the democratic principles of respect and equality. Active stakeholder engagement and participation can enhance community capacity, which can further lead to sustainable community changes.[33]

• Promoting continuous stakeholder participation is an important aspect of building capacity of a newly formed coalition. The results of this study indicate that building *collaborative skills* at the early stage of the partnership formation and throughout the collaborative process could be an effective way of enhancing participation. Another way is by reinforcing the stakeholders' commitment to this process. This can be done by providing *incentives* for community participation such as health screening and opportunities for networking. Stakeholders who perceive more benefits than costs are more likely to stay committed and continue to be involved with the coalition.

• Process evaluation is an important tool for continuous monitoring of the quality of the collaborative process during the planning phase of a partnership. Minimum *process evaluation* measures should be incorporated in the evaluation plan.

• Community *readiness* was an essential prerequisite of this successful collaborative initiative and therefore, organizers of similar initiatives need to take this element in consideration during the planning process.

• Effective *leadership* is an important aspect of success of any collaborative process and efforts should take place to maintain a high quality of leadership.

• Coalitions need to continue to collaborate with *media* representatives in order to enhance their visibility and community participation.

• Coalitions need to continue to foster communication among their members through newsletters, emails, websites, and other similar tools.

In conclusion, no published study has described the application of a systematic process evaluation of a partnership during the formation stage. The results of this process evaluation provide support to the existing literature that indeed coalition processes, coalition structures, leadership and staff, membership, and the context and history of the partnership are all important elements for a strong formation of a partnership.[7] In addition, this study highlighted the importance of building effective collaborative skills among the stakeholders early in the planning phase as it relates strongly to high stakeholder attendance at the partnership meetings. Moreover, the use of qualitative research was instrumental in understanding various aspects of the collaborative process (e.g., how the stakeholders felt about the collaborative process) that could not have been assessed via quantitative research. Not all collaborative partnerships and coalitions have the resources to conduct such an in-depth and comprehensive process evaluation. However, some form of process evaluation during the formation

stage as well as during the other stages of development is recommended. As Butterfoss et al.[7] have emphasized, formation does matter if we want to build strong and sustainable partnerships.

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