Coalition Building: What Happens When External Facilitators Put CBPR Principles in Practice? Ethnographic Examples from the Massachusetts HEALing Communities Study

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Abstract

The HEALing Communities Study (HCS) is a large-scale multisite study testing community engagement using coalition facilitation as an approach to addressing the worsening overdose crisis. Within community engagement, community-based participatory research (CBPR) principles guide researchers on best practices for working in partnership with communities, yet these principles have not been well researched in large, complex, multisite studies. This paper uses ethnographic methods to explore how coalitions operationalized CBPR principles during early coalition formation. Two coders independently analyzed 101 ethnographies from HCS coalition meetings in eight Massachusetts communities held between November 2019 and December 2020. Themes were developed through consensus between the coders, followed by group discussions among the authorship team. We found that mutual trust, shared goals, addressing power dynamics, meeting structure, and attending to the sociopolitical community context are critical elements that can either hinder or advance the use of CBPR principles in practice. These findings provide unique suggestions for future community-engaged multisite studies, and demonstrate the importance of research teams mitigating inherent power imbalances by acknowledging and creating spaces for community ownership. The findings also highlight the value of a community engagement facilitator (CEF) role, as well as strategies like transparency, uniting over shared interests, and bringing in a wide range of stakeholders when operationalizing CBPR principles.

The opioid overdose epidemic is a major public health crisis in the U.S. More than 69,710 opioid-related overdose deaths occurred in 2020 (Centers for Disease Control and Prevention, 2021). Rates of fatal and non-fatal opioid-related overdoses are expected to increase due to social isolation and limited access to treatment related to the COVID-19 pandemic (Macmadu et al., 2021; Patel et al., 2021). Although opioid overdose is a well-documented national epidemic, drivers of opioid overdose rates are complex and vary across and within communities and regions. Innovative approaches tailored to local context and grounded in scientific theory are necessary to support community-driven efforts to reduce fatal opioid-related overdoses. Community engagement (CE) is one approach to addressing this crisis.

Community-engaged research (CEnR) represents a continuum of approaches that emphasize participatory and cooperative co-learning between communities and academic partners. Community-based participatory research (CBPR) is an exemplar methodology on the CEnR continuum that uses a core set of principles to guide development of equitable partnerships by involving community stakeholders in the study process and building off local expertise, experience, and unique strengths and perspectives (Wallerstein & Duran, 2008). As opposed to traditional research methods, CBPR researchers work collaboratively with community members who share responsibility for all elements of the study (Minkler & Wallerstein, 2008).

The literature identifies ten guiding principles of CBPR: 1) Recognize the community as the unit of identity. 2) Build on strengths and resources within the community. 3) Facilitate a collaborative, equitable partnership in all phases of the research. 4) Promote co-learning and capacity-building among all partners. 5) Integrate and achieve a balance between research and action to mutually benefit all partners. 6) Emphasize public-health problems

of local relevance and ecological perspectives that recognize the multiple determinants of health and disease. 7) Use a cyclical and iterative process. 8) Disseminate findings to all partners and involve all partners in dissemination. 9) Establish a long-term commitment to the process. 10) Address issues of race, ethnicity, racism, and social class, and embrace "cultural humility" (Burke et al., 2013; Collins et al., 2018; Israel et al., 2008; Minkler & Wallerstein, 2008). The core of these principles has remained the same in the literature, despite some variation over time.

CBPR-guided research has the ability to impact outcomes and sustainability of study efforts (Oetzel et al., 2018). However, few large-scale multisite studies identify how the CBPR principles are demonstrated or adopted. The HEALing (Helping to End Addiction Long-term) Communities Study (HCS) (ClinicalTrials.gov Identifier NCT04111939) is a community-engaged, multisite, cluster-randomized trial that draws on principles of CBPR to partner with coalitions in 67 communities across four states (Chandler et al., 2020). The goal of the HCS is to examine the effectiveness and implementation success of the Communities That Heal (CTH) intervention, a three-component intervention based on expanding evidence-based practices (EBPs) shown to reduce opioid overdose deaths (The HEALing Communities Study Consortium, 2020). CTH includes three components: 1) community engagement with coalitions to develop and deploy comprehensive, data-driven plans for EBP selection and implementation across multiple community sectors (Sprague Martinez et al., 2020); 2) the Opioid Reduction Continuum of Care Approach (ORCCA), which consists of a list of EBP options to be implemented in the areas of overdose education and naloxone distribution (OEND), medication for opioid use disorder (MOUD) treatment, and safer opioid prescribing (Winhusen et al., 2020); 3) community-informed communication campaigns to address stigma and raise awareness about services (Lefebvre et al., 2020).

Community engagement in the CTH intervention occurs within a coalition-building process. Coalition building and planning engages local stakeholders from each community and those most impacted by the decision-making process—including people who live, work, and use drugs in the community. Coalition building is found to be an effective implementation strategy for planning and implementing community-based health interventions (Wallerstein et al., 2015). In the Massachusetts HCS CTH process, a community-facing team guides the CEnR activities. The community-facing team includes a community engagement facilitator (CEF), coalition coordinator, community data manager (CDM), and community faculty member. The CEF guides the coalition through the six phases of the CTH intervention (Sprague Martinez et al., 2020). The coalition coordinator manages the coalition on a day-to-day basis and is based in the community. The CDM provides statistical and epidemiological expertise and supports implementation progress and monitoring, while the community faculty member provides subject-matter expertise in addiction medicine.

The CE model incorporates CBPR principles to shape the way research staff engage with community partners. In Massachusetts, training emphasizing the core principles of CBPR was required for all research staff before study implementation. While the CBPR guiding principles are important to fostering true community engagement, they can be difficult to operationalize, particularly within a large-scale study. The HCS offers an opportunity to examine how CBPR principles are demonstrated within a large, fast-moving study using community coalition facilitation. This paper utilizes ethnographic data from coalition meetings to examine themes related to barriers and facilitators to operationalizing CBPR principles during the initial year of coalition formation and EBP selection in Massachusetts.

Methods

Study Setting and Data-Collection Procedures

Ethnography is a participant observation method that aims to produce highly detailed data describing community experience or respond to a common phenomenon of interest (Green & Thorogood, 2018). Ethnographic perspectives are either from an *emic* insider's view, such as that of a participant, or from an *etic* outsider's view of a researcher who observes but does not participate in the phenomena being studied (Hall & Callery, 2001). In HCS, we used an etic perspective to describe the complex phenomena of coalition building and the use of CBPR principles within study-funded communities.

For this analysis, ethnographic notes were taken during CTH community coalition meetings across Massachusetts between November 2019 (coalition initiation) and December 2020 (cover coalition formation and EBP selection). Eight

communities were included. Coalition meetings began in person during coalition initiation and moved to remote meetings at the onset of the COVID-19 pandemic in March 2020, which caused a disruption to the regular rhythm and attendance of coalition meetings. During this time, the data-collection process did not change, although the ethnographers collected all data remotely. These communities represent the Massachusetts HCS communities randomly selected to receive the intervention during the initial time period (wave 1) and include six urban and two rural communities as defined by the U.S. Census Bureau's American Community Survey (U.S. Census Bureau, 2021b). Community characteristics by urban-rural status are presented in Table 1.

Two members of the Massachusetts HCS Implementation Science (IS) research team attended all coalition meetings as observers and ethnographers. During coalition meeting introductions, ethnographers introduced themselves as members of the HCS IS core who "study the study." The ethnographers attended coalition meetings to observe and take notes on the coalition's process; ethnographers are not a part of community coalitions. Six ethnographers were assigned, in consistent ethnographer dyads, to each coalition for ongoing observation and ethnographic data collection. The goal of this approach was to familiarize ethnographers with their assigned coalitions and gain knowledge about the coalition over time.

All six ethnographers were trained in qualitative methods and received additional study-specific training in ethnographic methods from senior researchers with methodological and CBPR expertise. Training topics included introducing oneself at coalition meetings, engaging in participant observation without "othering" coalition members, taking field notes, identifying examples of CBPR principles, producing a written narrative based on field notes, and practicing reflexivity—or, in other words, acknowledging the experiences and perspectives the researcher is

Table 1. Community Characteristics by Urban-Rural Status in Massachusetts

Community Characteristics	Massachusetts	
	Urban % or Est. (SD)	Rural % or Est. (SD)
Number of randomized communities	6	2
Population aged 18+, 2019[a]	300,204	49,703
Population, aged 18+ by age[a]		
Age 18–34	96,604	10,966
Age 35–54	95,526	14,788
Age 55+	108,074	23,949
Population aged 18+ by sex[a]		
Female	157,433	24,427
Male	142,771	25,276
Population, aged 18+, by race/ethnicity[a]		
Black	38,846	806
Hispanic	43,065	1,629
White	181,730	45,791
Other	36,563	1,477
Area Deprivation Index (ADI; scale of 0–1, 1 being highest)[b]	37.33	20.57
Percentage of adults aged 25+ with high school education or more, 2014–2019[c]	85.1%	95.9%
Median household income, 2014–2019[c]	$57,845	$81,761
Percentage of households receiving public assistance, 2014–2019[c]	19.0%	3.0%

[a] U.S. Census Bureau, 2021b.
[b] Kind & Buckingham, 2018; University of Wisconsin, 2021.
[c] U.S. Census Bureau, 2021a.

bringing which influence the research environment and work produced (Green & Thorogood, 2018; Hall & Callery, 2001). The ethnographers used a field-note template to promote consistency in data collection across communities and over time (Appendix A). The template included unstructured space for ethnographers to document general meeting observations and a structured table to record examples of, or reflections about, each of the 10 CBPR principles. The 10 CBPR principles were defined in the table using the definitions provided in the literature by Minkler et al (2012, p. 60). The tables were then used to identify examples that illustrated adherence to or absence of CBPR principles. In addition to full coalition meetings, communities held content-focused subcommittee meetings. Ethnographers were not present during subcommittee meetings and only attended full coalition meetings.

This research was approved by Advarra Inc., the HCS single institutional review board (sIRB: Phoero0038088, Amendment #03). The Standards for Reporting Qualitative Research recommendations for reporting on ethnographic approaches in implementation research are used to enhance rigor and transparency in describing the methodological approach and results (Gertner et al., 2021; O'Brien et al., 2014).

Data Analysis

Ethnographic descriptions from the structured CBPR table in the field notes were analyzed using thematic analysis methods (Ryan & Bernard, 2003). Two members of the study team independently reviewed the data in the CBPR tables to identify initial codes within the context of the 10 CBPR principles. Discussing the set of codes and grounding them within each CBPR principle was imperative to codebook development and solidifying inclusion and exclusion criteria for each code. Once consensus was reached between the two coders and a final codebook was developed, the researchers independently coded the ethnographic tables using the codebook (Appendix B). The coders met regularly to review code application, discuss challenging passages, and achieve coding consensus.

Once the CBPR tables in the field notes were coded using the final codebook, members of the IS core discussed preliminary coding to draft themes. The larger research team then met three times to finalize themes related to implementation barriers and facilitators. The research team noted substantial overlapping concepts associated with multiple CBPR principles. While the CBPR principles provided a way to organize data into concepts, the identified themes spanned multiple principles. All coding and qualitative analyses were conducted in NVivo 12.0.

Results

Over 13 months, there were 101 full coalition meetings across the eight communities, ranging from 9 to 16 meetings per community. Most coalitions met monthly for 60 to 120 minutes. During various phases and the emergence of COVID-19, some coalitions opted to meet semi-monthly and all coalitions adopted a virtual meeting format beginning in April 2020. A total of 429 individuals attended at least one coalition meeting with individual coalition membership ranging from 23 to 79 individuals per coalition. The average number of attendees at each coalition meeting per community ranged from 10 to 29 individuals.

Five central themes emerged that served as facilitators and barriers to realizing specific CBPR principles within the coalition formation and early EBP implementation phases: 1) importance of trust, familiarity, and mutual support; 2) magnitude of shared goals; 3) power dynamics between the research site and the community; 4) meeting structure matters; and 5) the need to consider the sociopolitical context of the community in planning and implementation. Each theme is described below, along with direct statements from the ethnographers and identification of the CBPR principles linked to each theme (Appendix C). Each overarching theme sometimes served as a facilitator or a barrier to actualizing the CBPR principles.

Theme 1: Importance of trust, familiarity, and mutual support

Trust, familiarity, and mutual support among coalition members serves as a facilitator supporting the demonstration of Principles 2, 3, 4, and 5.

> The coalition is incredibly collaborative and are constantly offering ways to support each other. There is no feeling of competition for funding or resources between the organizations [represented by coalition members]. They appear unified in their goal of supporting their shared community. (Community 4, November 2020)

Working within a familiar and supportive environment fosters collaboration and capacity-building among coalition members and enables them to build on their knowledge and strengths.

> This meeting demonstrated how the coalition may be moving from a combative "storming" phase to a more peaceful "norming" phase. As coalition members presented their intervention updates, they highlighted how other coalition members had collaborated or contributed to progress. Coalition members demonstrated appreciation for each other's efforts. (Community 3, November 2020)

Similarly, a trusting relationship between the CEF and coalition members created space for shared ownership of the work and balanced research and community priorities necessary to implement interventions. Facilitation skills supported the presence of Principle 5 and trusting relationships opened space for feedback from coalition members.

> The [CEFs] are truly facilitators … allowing the coalition to take ownership and share updates, while sharing research site updates in clear, accessible language. The participation from various coalition members and the constructive feedback provided to the research site staff shows a clear investment from coalition members in the materials and findings of the study. (Community 6, August 2020)

Another ethnographer noted that the CEFs focused on building strong community relationships with coalition members and community organizations, which require expanding coalition membership to bring in new voices and share additional resources:

> The coalition members speaking up now were not the ones speaking up in the beginning and were not even present at the table. It is exciting to be hearing from peer recovery coaches and volunteers, not just town officials. The CEF's facilitation skills and local relationships/knowledge are key in this change I believe. (Community 2, May 2020)

Conversely, a lack of trust, familiarity, and mutual support served as a barrier to the demonstration of these principles. In the absence of familiarity and trust, coalition members tended to prioritize their own organizations, and they were less engaged in collaboration, learning about others, and focusing on the good of the larger community:

> Coalition members listened to each other's ideas and were respectful. However, the very vocal organizations seem to want to prioritize their suggested interventions. Additionally, coalition members still seem to be unfamiliar with one another as observed when [a coalition member] referenced [another coalition member] as "the gentleman from [local organization]"; there do not seem to be set standards for referencing other coalition members. (Community 1, July 2020)

While some interventions may address and support co-learning, there were instances where organizations were more interested in interventions strictly promoting their own organization:

> The idea of a navigator at each organization who would communicate with other organizations would be a space that facilitated co-learning. However, [one local organization] and [another local organization] are struggling with how to promote capacity building at both partners instead of just advocating for their own organization. (Community 3, August 2020)

Theme 2: Magnitude of shared goals

Shared goals among coalition members appeared to be a critical facilitator for the presence of Principles 1 and 5 at coalition meetings. Coalitions with shared goals seemed to instinctively promote the idea of the community as their unit of identity and demonstrated openness to changes and true partnership based on coalition and community needs:

> A coalition member shared that sentiment that they want and need feedback from the community and other organizations in order to be as effective as possible in their outreach. They shared that while their agency is housing the position, they are serving the community, which was powerful. (Community 5, December 2020)

A mutual understanding and set of shared goals were also very important between the research site and the coalition in terms of promoting trust. Ethnographers identified this as critical to moving forward:

> The research site … explains the expectations of the study from the start of the coalition, the charter outlined the expectations of the coalition membership and provided the members an opportunity to vote on their commitment to the coalition by agreeing to the charter. (Community 2, February 2020)

Conversely, in cases where the coalition did not share goals with the research site, coalition engagement and movement toward the study goals waned:

> The coalition currently does not believe that this project is beneficial to them. There is a clear feeling that the work they will be doing is replicating work that is already occurring in the community. The research site is not doing a good job of explaining how the community can use the money from the grant to fill in gaps. (Community 2, February 2020)

Theme 3: Power dynamics between research site and community

Power dynamics between the research site and coalition members emerged as both a barrier and facilitator to operationalizing Principles 3, 5, 7, and 8. Coalition members displayed stronger engagement when the research site and coalition shared power and space in meetings:

> The [CEF] does a good job of allowing the coalition to take ownership of several action items and present their own opinions on various barriers and services in the community. The discussions are not formally structured but seem to work well for this group; people appear comfortable providing feedback regardless of their organization or expertise. The meeting agenda guides the coalition in terms of expectation and meeting topics but otherwise the conversation flows naturally with some facilitation from [the CEF]. (Community 1, May 2020)

Strategies such as facilitated discussions to uplift coalition members' voices addressed the inherent power imbalance between the coalition and the research site, and encouraged an equitable relationship between the parties. One ethnographer noted:

> All participants were asked to introduce themselves and identify their hopes and concerns about the study. This led to an open discussion of shared goals and potential issues from the community perspective. This activity created an environment where community voices were elevated, so that the process was not driven entirely by the research team. All of the hopes/issues were written on a board at the front of the room for everyone to see and reflect on. (Community 4, February 2020)

Power sharing was evident when coalition members serving in champion roles, began leading meetings, presenting information, and engaging with their peer coalition members rather than relying on the CEF to lead this process. Champions were individuals who were tasked with providing leadership for a specific component of the CTH intervention. Champions had knowledge and expertise within a specific content area (i.e., communications, MOUD) and were often viewed as influential in their communities. As noted in one coalition:

> The data and communications champions are taking on a bigger role in presenting updates to the coalition. In these two instances, the community-facing team takes more of a back seat and coalition members are beginning to take on more ownership of these activities. (Community 6, April 2020)

Power dynamics were also a barrier to Principles 3, 5, 7, and 8. When the research site did not actively include coalition members' feedback and voices, coalition members were less invested in the work. An ethnography notes, "The iterative process was lacking. After learning that several of their selected intervention strategies were not approved by the HCS research team, the coalition did not engage in problem-solving activities. Instead, the meeting had a very negative, demobilizing energy" (Community 4, July 2020).

Since the research site inherently holds power as the purveyor of study funding, it was important for community-facing teams to address this imbalance and create space for coalition-member voices as part of incorporating the CBPR principles, while being transparent about which decisions were in the purview of the coalition and which were ultimately up to the research site. Coalition members occasionally called attention to the impact of power dynamics between the research site and coalition that highlighted the relationship as a barrier to Principle 5:

> There seems to be tension between the research site and coalition members. The breakout room I was in discussed that the coalition feels dictated by [the research site] instead of led by the coalition. They explained there is not transparency and clarity between the two parties, and if the community had real ownership of the coalition, they could get this work done more efficiently. (Community 7, December 2020)

Theme 4: Meeting structure matters

As a community-engaged study, the coalition meeting structure served to facilitate engagement, collaborative partnerships, and a sense of ownership among coalition members. When meeting time was structured, coalition meetings demonstrated Principles 3, 4, 7, and 8. As described in Theme 3 related to power dynamics between the research site and community, having a structure that included content experts on the coalition as champions also helped to navigate the power dynamic between the research site and the coalition. One ethnographer noted how using content champions and creating space for coalition-member updates increased engagement and ownership by members:

> Coalition members shared updates from the subgroups. Each update was clear and comprehensive. Due to the large amount of discussion that occurred after each subgroup update, it appears the coalition members are beginning to feel invested and responsible for the progress being made. There is some sense of "ownership" over each of the subgroups, which is shared by several coalition members, but all appear comfortable commenting on the various subgroups' work. (Community 1, May 2020)

Other examples of intentional meeting structure, such as breakout rooms, also facilitated a sense of ownership among the coalition:

> The breakout groups were a great way to start allowing community members to work and learn from each other. The different [CEFs] in each room provide a different capacity for co-learning. The community faculty member is a skilled facilitator who frames [their] breakout session in a series of questions to receive the most information around the data presented as possible. This promotes co-learning as the research site provides the data and the coalition discusses the reality of what the data shows and how useful the data are to the coalition and the work they are trying to accomplish. (Community 8, April 2020)

The structure and use of meeting time were important factors for whether Principles 3, 4, 7, and 8 were demonstrated. In contrast, limitations in meeting structure due to study timeline restrictions posed challenges to engagement. As stated by one ethnographer: "All updates are followed by discussion to provide feedback and suggestions, although this space is not often taken advantage of. Due to the timing challenges experienced in today's coalition meeting, the spaces for discussion did not feel like enough time" (Community 1, November 2020). The COVID-19 pandemic created new structure challenges due to remote meetings. Several ethnographies noted the barriers related to remote meeting structures and how they posed challenges for engagement and decision making: "Had we not been on Zoom, it would have been easier to gage the coalition members' [who were off camera] responses" (Community 5, September 2020); "The meeting was planned to be shorter in length than normal due to Zoom fatigue" (Community 6, May 2020); "It is a bit hard to do consensus on Zoom" (Community 2, June 2020).

Theme 5: The need to consider community sociopolitical context

Coalition meetings often included discussions about ongoing social and political issues such as racial equity, economic stability, stigma, insufficient affordable housing, and other factors that impact community members' access to prevention, harm reduction, and treatment for opioid use disorder

(OUD). Framing OUD within the existing local community, state, and national sociopolitical contexts was highly important to stakeholders. At times, coalition members facilitated conversations around Principles 6 and 10, and emphasized the importance of incorporating an equity lens into their work. One ethnographer noted:

> In this coalition meeting, the CDM shares a PowerPoint with local overdose data. A coalition member is concerned that there is no data for Black Americans being shown in demographics graph. The coalition member shared their concern because they know Hispanic and African American populations are being hurt. She is astonished that there have been zero deaths in two years among African Americans. (Community 5, June 2020)

Coalition members engaged in conversations that focused on stigma, a lack of affordable housing, and the COVID-19 pandemic. These discussions prompted meeting leaders to focus on relevant local public-health issues in coalition meetings:

> The coalition discussed how stigma prevents many in the community from accessing Naloxone. They also mentioned barriers and regulations that dictate which organizations can distribute Naloxone and how that needs to be tracked. The coalition considered these factors when brainstorming interventions, and they were leaning towards expanding Naloxone. A coalition member shared that their agency has been trying to get NaloxBoxes for a while and COVID-19 put a halt on that effort. They added that it is difficult to get places to put out the boxes in public because of stigma, people say that the boxes "invite those people here." (Community 2, June 2020)

Discussions of stigma and community social context could also facilitate actualization of other CBPR principles such as co-learning and capacity-building across stakeholders. For example, one ethnography noted, "There was a lovely example of co-learning in today's meeting when one coalition member shared appropriate language with the coalition encouraging everyone to read through it and think about the language used to discuss substance use disorder" (Community 2, October 2020).

When discussions about sociopolitical context arose in coalition meetings, ethnographers noted their importance to coalition efforts or community engagement. However, many ethnography tables often stated, "this principle was not discussed during this meeting." Principle 10—related to race, ethnicity, and class—was discussed less frequently than Principle 6, addressing relevant public health issues. Principle 6 was naturally addressed more due to the study focus, while issues related to Principle 10 were often "not addressed during this meeting." Typically, ethnographies identified a lack of focus on these principles as appearing due to time constraints. One ethnographer noted the limited time given to these topics in a coalition meeting:

> A passionate conversation occurred around the need to address housing stability for individuals with opioid use disorder, particularly in light of COVID-19 and the approaching winter months. While the discussion was well intended and expressed appreciation of interconnections in individual's lives, little progress was made due to time constraints. This issue will continue to be discussed in a smaller group moving forward. (Community 7, November 2020)

Some coalitions determined that the better way to address these issues were via subcommittees or other small groups focused on race, equity, and social justice, and then brought discussions back to the larger coalition once a potential strategy had been identified in the smaller group.

Discussion

We examined how the CBPR principles were operationalized by community research teams working with eight coalitions established as part of CTH intervention in a study that used facilitation as a primary implementation strategy. Five core themes were observed related to facilitators and barriers to the adoption of CBPR principles. Across the eight communities studied, we found that when trusting relationships existed both among coalition members themselves, as well as between the research site's community team and the coalition members, the principles were likely to be exhibited. Shared goals related to research activities enhanced the use of CBPR principles. Power and power sharing emerged as a key theme, and the extent to which power dynamics were attended to impacted coalition functioning.

Meeting structure also impacted the actualization of the CBPR principles. Lastly, it was necessary within the coalition structure to attend to the social context within communities, specifically the intersection of social determinants of health, stigma, and marginalization of people who use drugs. Despite the importance of social context, issues related to race and cultural humility often were not discussed during coalition meetings for a multitude of reasons, including time constraints.

Trust served as a facilitator to embodying CBPR principles. Coalition engagement that involved shared understanding of decision-making power fostered mutual respect and joint problem solving between the research team and coalition members. Our study also found that creating opportunities for coalition-member engagement and elevating community expertise was critical for demonstrating CBPR principles. Trusting relationships between the CEFs and coalition members allowed for candid feedback around the study process. These results are consistent with findings from other studies, such as a study that examined important elements of building early trust between researchers and American Indian communities (Christopher et al., 2008).

Shared goals encouraged collaboration and ownership among the coalition. This aligns with the literature that highlights the influence of shared goals on a group's decision-making and process (Gilson & Shalley, 2004). These coalitions were comprised of a broad range of stakeholders, as well as research staff, uniting over a shared vision facilitated by the CBPR principles. While goal-oriented work engaged partners in this study, previous research has highlighted that focusing on narrow goals rather than addressing systemic forces can limit ability for change-making (Ishimaru, 2014; McLaughlin, 1989).

Power dynamics between the research site and coalition served as both a facilitator and barrier to the CBPR principles. Community teams who created space for coalition ownership were able to share power within the inherently hierarchical research structure. These facilitation skills allowed those communities to embody CBPR principles. On the other hand, power dynamics associated with the hierarchical structure led coalition members to be less engaged. Addressing power dynamics is critical for successful CBPR, with some suggesting that CBPR principles cannot be operationalized unless these power dynamics are identified and addressed during the research process (Muhammad et al., 2015). The power dynamics we found between the research site and the coalition are not surprising for several reasons. These were often new coalitions that needed to boundary span or boundary separate at times, needing to integrate with unfamiliar communities or separate one community from existing cross-community work. The power dynamics within coalitions were also not surprising, given the stages of forming, storming, and norming that needed to happen before a coalition could begin identifying and setting up interventions (McGinnis et al., 2010; Tuckman, 1965).

Coalition meetings served as spaces in which community teams were able to operationalize the CBPR principles. Specific aspects of meeting structure, such as smaller groups and content champions, were foundational for actualizing the CBPR principles of recognizing the community as a unit of identity and engaging in co-learning and shared decision-making. However, when meeting structure was impeded by time restrictions, actualizing the principles was more challenging. When coalitions were required to move from in-person to remote meetings during the COVID-19 pandemic, there were multiple times where ethnographers noted the challenge of perceiving engagement when participants did not have video cameras on. Community-based organizations, particularly those serving marginalized populations, were extremely impacted by the COVID-19 pandemic (Pinto & Park, 2020) and substance use treatment providers and their patients may have been especially affected (Pagano et al., 2021; Rosca et al., 2020). Coalition meetings held during the workday likely served as another barrier for engagement, as coalition members were attending to other responsibilities.

Addressing the sociopolitical community context served as a facilitator for CBPR principles. Stigma related to substance use emerged as an important community contextual factor. In early coalition formation, stigma toward persons with OUD and persons using opioids was clearly acknowledged by coalition members as a critical issue. Stigma serves to marginalize some members of the community whose voices are most needed to inform this work.

Issues of race, ethnicity, and cultural humility were less frequently addressed during these early coalition meetings, despite the fact that the opioid overdose epidemic disproportionately impacts persons of color and marginalized populations—and that these inequities were only amplified during the COVID-19 pandemic (Cano, 2021;

Lippold et al., 2019; Ochalek et al., 2020; Rosca et al., 2020). It was also notable that, although several of the communities were comprised of racially and culturally diverse populations, the coalitions were composed predominately of white individuals who often worked for well-established healthcare and treatment providers. Yet coalition members stated their desire to expand the diversity of coalitions, and several coalitions created subcommittees to create space for equity-related work. The need for research to quickly move forward often leads to partnerships being predominantly with larger organizations or institutions that hold power, or allowing these organizations to hold the majority of the power within a coalition. In doing so, there is the risk of further contributing to inequitable dynamics in the coalition, pointing to the critical need for the balance of power and the role of the facilitator in both engaging and elevating the voices of those most marginalized as they work to build consensus and engagement within the coalition. Not addressing these issues serves to perpetuate existing inequities and replicate existing structures that produce inequities. This will be an important challenge and opportunity for the coalitions moving forward.

This paper is not without limitations. First, our work was conducted in one relatively small state and therefore may not be reflective of how coalitions will operate in other states that participate in this study. Despite our analysis being conducted in a single state, it is notable that all the actual work of the study, including the CTH intervention and community coalition formation, is being conducted in additional states that are different than Massachusetts and different from each other. This experience points out that the work of using community coalitions as an implementation strategy can be used in states that vary widely in terms of their geography, political environments, health-services environment, and other demographic and cultural factors.

Second, as with all qualitative data, our findings may not be generalizable to other settings. However, our findings may be transferable to other implementation studies that use a community-engaged facilitation approach and coalition-building as a primary implementation strategy. Moreover, our findings regarding how CBPR principles can be used to address a highly stigmatized issue and conform to a rapid study timeline may be transferrable to other CBPR studies.

Third, our study included data only from full coalition meetings, and we were unable to capture smaller subcommittee meetings which may have been facilitated differently by community-facing teams or have different dynamics due to smaller numbers of individuals participating. Since the full coalition meeting includes both coalition members and study staff, the dynamic and discussion is inherently different from smaller, more focused meetings. However, while we were unable to obtain data from smaller meetings, we were able to obtain data from a large number of meetings that were therefore likely reflective of the overall tenor of the coalition process.

Fourth, like all ethnographic data, the findings are from the perspective of ethnographers and do not include the perspective of community coalition members beyond the CEFs and CDMs. We took an etic perspective; therefore our findings represent the observer perspective rather than the participant perspective, and we recognize that community coalition members could have interpreted some interactions differently. While we do not have the insider perspective, an important strength is that our data collection was direct rather than reported at a later time point via interviews. This enables us to partially overcome concerns related to misremembering or biased self-reporting. This perspective is also useful for understanding how people delivering or receiving an intervention behave in real life.

Finally, for this analysis, we solely coded the structured tables of CBPR principles rather than the entire set of ethnographic field notes taken at each meeting. Given the focused nature of this analysis on themes related to the presence and absence of these principles, coding the entire ethnography may yield additional insights.

It is important to note that a few months into coalition formation, the COVID-19 pandemic occurred. At this time, meetings that had begun in person transitioned to video and telephonic meetings. Early on, many participants experienced technological challenges that may have impacted facilitation and interactions. Also during this time, some coalition members lost their jobs while others necessarily prioritized responsibilities to their organizations, which may have led to less engagement during this extended pandemic. However, the coalitions and the work of standing-up interventions continued despite the many challenges, and the focus on the sociopolitical context became potentially even more important

in light of COVID-19 and its impact on highly stigmatized populations. While COVID-19 likely challenged the use of CBPR principles, this natural experiment provides an important lesson in coalition formation and the ability to perform community good even in the most difficult times. It is very likely that operationalizing CBPR principles played an important role in coalitions being able to continue strong functioning during this time.

Conclusion

By using ethnography as a new form of analysis for CBPR principles, our results provide important insights about a community-engaged approach, along with facilitators and barriers to utilizing the CBPR principles. Our findings also highlight the importance of facilitating a partnership that fosters co-learning and integrating community needs, as well as the imperatives of the research and the need to acknowledge issues of stigma, sociopolitical context, and social determinants of health as important to representation. Prior studies underscore the importance of all stages of the community-academic partnership (Dill et al., 2020).

Our study provided several important lessons and recommendations for the coalition-formation stage of such a partnership, including: 1) the need to build trusting relationships early between the community and academic partners, and to also foster these between community partners themselves; 2) the critical nature of having a shared set of goals and understanding of the research activities and expectations, and how these intersect with coalition priorities, community priorities, and individual organization and member priorities; 3) the need to be aware of power dynamics both between the academic and community partners, as well as within each group, and be willing to address these issues early and often and fully share power; 4) being cognizant of the fact that the meeting space and the meeting itself is not just pro forma, but focusing on how important it is to have engaged and useful meetings and think about how meetings are structured and managed—including using different formats to ensure that all feel they can participate, not having top-down but more interactive meetings, ensuring that both community partners and academic partners share leadership roles, and making space for all voices; and 5) the importance of openly acknowledging and attending to what else is happening in a community in terms of the social and political context, particularly when the issue being addressed by the coalition can carry a great deal of stigma.

While understanding partnership development and early formation to implement EBPs is vital, future research on the HCS coalitions should also consider how partnerships morph over time, including examining the active EBP implementation phase and the concluding phase of the active community-engagement activities. It is notable, although perhaps not surprising, that CBPR Principle 9, establishing a long-term commitment to the process, was not noted by the ethnographers and not addressed by the community-facing teams during early coalition formation. However, this longer-term commitment to the process will be important to assess over time once the study period ends to understand how coalitions both sustain the intervention and maintain their new partnerships in order to continue to address the opioid overdose crisis.

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List of Abbreviations

CAB: Community Advisory Board
CBPR: Community-Based Participatory Research
CDM: Community Data Manager
CE: Community Engagement
CEF: Community Engagement Facilitator
CEnR: Community-Engaged Research
CTH: Communities That Heal
EBP: Evidence-Based Practice
HCS: HEALing Communities Study
HEAL: Helping to End Addiction Long-term
IS: HCS Massachusetts Implementation Science research team
MOUD: Medication for Opioid Use Disorder
OEND: Overdose Education and Naloxone Distribution
ORCCA: Opioid Reduction Continuum of Care Approach
OUD: Opioid Use Disorder

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Appendix A: Ethnographic Guide for Field Notes

Directions: Use the following group ethnographic field notes template to structure observations collected during opioid coalition and Community Advisory Board meetings. Use descriptive language and paint a picture of the scenario.

Date/Time/Location:

Ethnographer:

Meeting Type (Include a brief description of purpose or circumstance of observation):

Describe the interaction, event, or process you observed, recalling the content of conversations. Things to consider:

- What was the role of external facilitation team in this interaction?
- Who, if anyone, dominated the conversation?
- Which voices were or were not represented?

Record your thoughts and impressions (labeled as appropriate) about what you observed and experience.

Appendix B: Principle Definitions and Codebook

Principle 1: Recognize community as the unit of identity *Burke et al. (2013) definition: "Recognize, distinguish, and respect the community as a unique and vital partner in the research process"*	
CAB representation	Discussion and integration of CAB members into coalition meetings. Include statements of how CAB members are/are not a part of the greater community.
Coalition attitude towards HCS	Statements about the coalition's perception of the research site. Include statements that view the research site as part of the coalition's identity, as well as statements that identify the research site as separate from the coalition's work.
Coalition familiarity and cohesion	Statements about connections between coalition members. Include statements about who is/is not included in the coalition, and whether connections between coalition members are friendly or adversarial.
Communications campaign recognizing local community	Interactions and dynamics between the research site's communications campaign and the local community coalition.
COVID-19	The impacts of COVID-19 on both the greater community as well as on the HCS coalition's work and structure.
Data engagement	Presentations and discussions of both local and HCS data with a focus on how the data does/does not highlight community needs or identity.
Discussing local healthcare needs and action planning	Conversations during coalition meetings around healthcare services that are available or needed in the community. Include statements about how this information is/is not incorporated into action planning, and whether this creates a sense of identity and shared purpose within the group.
Geographic tensions and discrepancies	Statements about how healthcare services are either blended or segregated between towns/cities. This code covers discussions around the HCS coalition's boundaries and combinations of towns to form coalitions.
Local political involvement and community leadership	Statements about local political leaders supporting or challenging the coalition's work.
Organizational vs. community needs	Statements about coalition members prioritizing the interests of the greater community or the interests of their own organizations. Include statements where the coalition unifies over a shared goal of attending to community needs.
Tools for community identity	Statements about specific strategies to support community and group cohesion. Some examples include creating a charter or welcoming new members in meetings.

Principle 2: Build on strengths and resources within the community *Burke et al. (2013) definition: "Listen to, learn from, and identify what each partner brings to the process—build on strengths and find solutions to challenges"*	
Action plan decision-making	Statements surrounding action planning based on the needs and resources in the community. This includes discussions around local resources, gaps in care, suggestions for organizations to be included in the conversation, and any challenges or successes the coalition sees while planning interventions.
COVID-19 impacts	Impacts of COVID-19 on resources within the community as well as the coalition's ability to work and design interventions in the context of a pandemic.
Data	Statements about data as a resource within coalition meetings. Include statements about coalition members' responses/lack of response to data, statements about data champions, partnerships between organizations sharing data and the coalitions' requests for specific data.
Issues related to competition and power	Statements about power dynamics both within the coalition and between the coalition and the research site. Specifically include how this impacts the coalition's ability to build on strengths and resources.
Representativeness of coalition resources	Statements about who is part of the coalition and what voices are missing. Include statements suggesting additional/fewer members and barriers to coalition membership.
Research site engaging coalition-led resources	Statements about the research site balancing or not balancing space during coalition meetings. This code includes the recognition and utilization of coalition resources by the research site, opportunities for coalition leadership alongside the research site, and processes for coalition decision-making.
Resource sharing	Examples of coalition members offering/not offering to share resources and data with other coalition members or the research site.
Role of the expert	Statements about who is viewed as an expert during coalition meetings. This can change within one meeting or between meetings. Some examples include, but are not limited to: coalition members, people with lived experience, people at the research site, or people in specific organizations.
Tendency to stick within area of expertise	Statements about when coalition members do/do not feel comfortable participating in conversations that are not their direct area of expertise.
Principle 3: Facilitate collaborative, equitable partnerships in all research phases and involves an empowering and power-sharing process that attends to social inequalities *Burke et al. (2013) definition: "Enable fairness and equality at each step of the research process"*	
CEF engaging coalition	Descriptions of specific strategies CEFs use to create connections and engagement among coalition members. This can include sending an agenda, reading the chat out loud, etc. Include statements about the impact of these strategies on coalition engagement and power-sharing.
Coalition meeting structure	Statements about the flow of meetings and their typical structure (or lack thereof). Include statements about the impact of coalition meeting structures and does/does not facilitate collaboration.
Relationship between research site and coalition	Statements about dynamics between the research site and coalition. Include descriptions of interactions, questions, points of clarification, and responses to each other. Additionally, include discussions of ownership of the coalition's work and decisions.
Relationships and familiarity between coalition members	This code includes interactions between coalition members that demonstrate an equal or unequal balance of power. This code includes descriptions of friendly conversations, acknowledgements of new members in the coalition, and tensions between representing organizations.
Tools for coalition engagement	Statements about specific tools and strategies to create equitable relationships within the coalition. Some examples include champions, subgroups, charters, and voting.
Voices heard in coalition meetings	Statements about how space is shared within coalition meetings. Include statements about how coalition meeting attendees navigate speaking up and stepping back, and tendencies for certain voices to be heard or valued more than others.

Principle 4: Promote co-learning and capacity-building among partners *Burke et al. (2013) definition: "Ensure all partners learn, grow, and share throughout the process"*	
Building coalition capacity through sharing information about local needs and resources	Statements about coalition members sharing information about what resources are available or needed in the community. Include descriptions of how this information sharing does/does not benefit coalition members and coalition planning.
Coalition-led presentations and discussions	This code covers descriptions of the presence or absence of coalition members taking leadership in the coalition. Include details on the structure of how coalition members lead during meetings (subgroups, champions, etc.). Lastly, include descriptions of how coalition-led presentations are received by the larger coalition.
Co-learning partnership between coalition and research site	Statements describing the dynamics of the partnership between the research site and coalition as they work together towards their goals. Include descriptions of who is speaking and leading coalition meetings as well as how leaders are received. Code these statements within the context of how this impacts coalition capacity-building and growth.
Meeting facilitator strategies and meeting structure	A subcode of "Co-learning partnership between coalition and research site," above. Code specific strategies meeting facilitators use to create co-learning and capacity-building. Include strategies that both do and do not support capacity-building within the coalition.
Tension and collaboration between coalition members	Statements describing how coalition members work together. Include statements about how coalition members support or do not support each other's learning and capacity-building.

Principle 5: Integrate and achieve a balance between research and action for the mutual benefit of all partners *Burke et al. (2013) definition: "Work toward a balance between research and action so that all partners benefit à la 'translation step—what we learn from research that is applied to service provision'"*	
Expectations	Statements describing what is expected at coalition meetings and what each partner is expected to bring. Include descriptions of when expectations are/are not met and whether they align with others' expectations.
Flexibility based on community needs	Code statements describing flexibility from the research site in response to community needs and changing local context.
Demands from the research site	Statements describing work the coalition must complete on behalf of the research site. Include how this work is received and understood by the coalition.
Inter-coalition dynamics	Descriptions of dynamics within the coalition and how this impacts the benefits partners can receive from the coalition's work.
Goals and outcomes	Statements describing both coalition members' and the research site's goals and desired outcomes from the coalition's work. Include descriptions of when these goals do/do not align with each other.
Centering coalition vs. research site	Statements describing how either the coalition or the research site was the focus of the coalition meeting. Include statements about buy-in from the coalition and the predominantly heard voices in the meeting.

Principle 6: Emphasize public-health problems of local relevance and ecological perspectives that attend to the multiple determinants of health and diseases *Burke et al. (2013) definition: "Know local and relevant health problems—learn about and respect the community's history and wide-ranging factors that impact their health and well-being"*	
Absence of principle	Statements describing when this principle was not addressed during the meeting. Include any barriers that prevented this principle from coming up.
Access to available care	Statements about the general OUD care available or needed in the community. Includes statements about silos between organizations as well as other barriers to the local healthcare system.
Age	Statements describing specific risk factors and experiences that are dependent on age.
Cell phones	Statements about the impact of cell-phone accessibility and cell reception on accessing OUD services.
COVID-19	Descriptions of the impact of COVID-19 on local resources and needs.
Criminal justice	Descriptions of the local criminal justice environment and their connection to OUD services. Include their reception and participation in coalition meetings.
EDs linking people to care	Statements describing silos or connections between care in the ED and other OUD care in the community.
General discussion of high-risk populations	Code coalition discussions around populations in the community who experience particular barriers to OUD care. Include action steps and discussions around designing interventions aimed at making services accessible for these communities.
Harm reduction	Statements about harm-reduction services available in the community. Include how these services are received by coalition members and local barriers to receiving harm-reduction services.
Housing	Code statements about accessible housing in the community and the needs of people experiencing homelessness with OUD. Include descriptions of the particular barriers and challenges people with OUD experience with housing. Include the response of the local community and coalition to these needs.
Language	Statements describing the need or availability of healthcare services in languages spoken in the community.
Safer prescribing	Descriptions of opioid-prescribing practices in the community.
Seasonal impacts	Statements about unique seasonal challenges, such as living in a vacation area or barriers related to weather.
Stigma	Descriptions of stigma in the community and how the coalition responds to and addresses stigma in their own work. Include descriptions of specific experiences and aspects of OUD that are highly stigmatized in the community.
Transportation	Statements describing the need or availability of transportation to health services in the community. Include descriptions of the impact transportation has on community partners and community members.

Principle 7: Involve systems development through a cyclical and iterative process *Burke et al. (2013) definition: "Build flexibility, feedback, and compromise into the process"*	
Absence of principle	Statements describing when this principle was not addressed during the meeting. Include any barriers that prevented this principle from coming up.
Barriers and facilitators to iterative process	Code descriptions of barriers and facilitators the coalition experiences when trying to promote an iterative process. Include barriers and facilitators that come up both through the research site and coalition, as well as strategies facilitators utilize to encourage an iterative process.
Charter maintaining an iterative process	Code descriptions of how the charter does/does not outline an iterative process. Include how this aspect of the charter is received by coalition members.
Feedback and iterations around data	Statements that specifically describe coalition conversations, suggestions, and requests for data.
Flexibility	Include the presence or absence of flexibility on the part of either the research site or coalition while working together to design interventions.
Implementation planning as an iterative process	Broad code that includes descriptions of implementation planning and how the coalition does/does not view this as an iterative process. Include how coalition members can or cannot ask questions, and how iterations are received by coalition members.
Research site involvement in iterative process	A subcode of "implementation planning as an iterative process," above. Include descriptions about how the research site specifically does/does not participate in iterative processes for implementation planning.

Principle 8: Disseminates findings and knowledge gained to all partners and involves all partners in the dissemination process *Burke et al. (2013) definition: "Share findings and lessons learned with all partners in meaningful ways to meet all partners' goals"*	
Clear and accessible knowledge dissemination	Broad code that describes how information is shared during coalition meetings and how accessible this information is to coalition members. Include specific strategies used to ensure clear communication, as well as instances where there are barriers to clear communication and dissemination.
Coalition engaged in disseminating knowledge	Statements describing instances where coalition members disseminate knowledge to the full coalition. Include how the information is received by the coalition and any conversations or questions that follow.
Communications campaign	Statements about how the communications campaign is/is not understood by the coalition. Include statements describing coalition buy-in and interest toward the communications campaign.
Data-related dissemination	Code statements describing how data is discussed among the coalition. Include questions the coalition has about data, and areas of interest and disinterest.
Expectations for information sharing and decision making	Statements outlining what coalition members expect from each other regarding sharing information and updates. Include instances when these expectations are/are not met.
Research site disseminating knowledge	Statements describing instances where the research site disseminates knowledge to the coalition. Include how the information is received by the coalition and any conversations or questions that follow.

Principle 9: Require a long-term process and commitment to sustainability *Burke et al. (2013) definition: "Commit to the problem, process, and evolving relationships"*	
Absence of sustainability conversations	Statements describing when sustainability was not addressed during the meeting. Include any barriers that prevented this principle from coming up.
Considering sustainability in implementation planning	Broad code including all conversations surrounding sustainability during implementation planning.
COVID-19	Impacts of COVID-19 on sustainability planning.
Drivers of sustainability discussions	Statements about who is leading sustainability discussions and what prompts these conversations. Include statements about whose voices are heard and prioritized.
Hiring community staff as commitment to sustainability	Statements describing how hiring local community members as part of coalition staff represents commitment to sustainability.
Level of community engagement	Statements describing coalition members' commitment to the group and attending meetings. Include descriptions about how this does/does not factor into long-term sustainability.
Study timeline	Code conversations about the study timeline and how this does or does not prompt conversations about sustainability. Include who is invested in the study timeline, and how clearly it is understood among the coalition.
Sudden end of grant funding	Statements describing the coalition's response and understanding of the end of grant funding. Include how this does or does not factor into sustainability discussions.
Tensions within coalition	Statements about how tensions within the coalition are a barrier to conversations about sustainability.
Principle 10: Addresses issues of race, ethnicity, racism and social class and embraces "cultural humility" *There was no definition for this principle in Burke et al. (2013).*	
Absence of principle	Statements describing when this principle was not addressed during the meeting. Include any barriers that prevented this principle from coming up.
Actively outreaching and engaging marginalized groups	Examples of the coalition taking active steps to include and make the coalition more accessible to marginalized groups.
Communications campaign	Descriptions of the communications campaign materials as accessible or inaccessible to all members of the community.
Considering inequities in action planning	This code describes instances where the coalition address inequities stemming from structural oppression in their action plans and interventions.
COVID-19 impacting health inequities	Descriptions of how COVID-19 exacerbates or replicates existing health inequities in the local community.
Intent or desire to include marginalized populations	Statements of intent to outreach to marginalized groups and make the coalition more accessible. The difference between this code and "actively outreaching and engaging marginalized groups" is the lack of action. This code specifically describes conversations where the coalition is in agreement to expand coalition representation, but does not follow through to make this happen.
Language barriers	Statements about how the coalition is/is not considering barriers to OUD services that are unique to individuals for whom English is not their first language.
Looking at inequities through data	Statements about the coalition using data presentations to highlight inequities in OUD care and outcomes in the community.
Perspective of those with lived experience	Statements about the presence or absence of voices of people with lived experience in the coalition. Include how people with lived experience are/are not considered during hiring.
Representation in coalition	Statements about the general makeup of coalitions as well as which voices are heard and prioritized within the coalition.
Subcommittees	Statements about subcommittees specifically working on addressing inequities in the coalition and community.

Appendix C: Themes and Relevant CBPR Principles

Theme	**Linked Principles** (see Appendix B)
1. Importance of trust, familiarity and mutual support	• Principle 2 • Principle 3 • Principle 4 • Principle 5
2. Magnitude of shared goals	• Principle 1 • Principle 5
3. Power dynamics between research site and community	• Principle 3 • Principle 5 • Principle 7 • Principle 8
4. Meeting structure matters	• Principle 3 • Principle 4 • Principle 7 • Principle 8
5. The need to consider community sociopolitical context	• Principle 6 • Principle 10