

# Evaluating the Impact and Effectiveness of Flint's Community Ethics Review Board (CBOP-CERB): A Pilot Study

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2) *My Exceptionality*

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**ABSTRACT:**

In recognition of the importance of evaluation for funding, research, and quality improvement, a longstanding Community Advisory Board (CAB) in Flint Michigan embarked on a process to evaluate their impact. The Community Based Organization Partners (CBOP) - Community Ethics Review Board (CBOP-CERB) engaged a research team composed of an academic researcher (Solomon Cargill) and a community partner (Spencer) to obtain funding, design and implement an evaluation of the CBOP-CERB. This evaluation study yielded two evaluations of the CBOP-CERB, one with researchers who had engaged with the CBOP-CERB and the other with Flint area community residents. The results of these two evaluations can serve to show other CABs how to establish and expand their impact, establish their worth for future funding, and how to articulate, evaluate, and achieve their goals.

**KEYWORDS:** Ethics, Community-Based Participatory Research, Community health partnerships, Community health research, Health disparities, Health outcomes, Health promotion, Power sharing, Process issues

## Introduction

Community Advisory Boards (CAB) have been championed by community as well as academic proponents for years, most prominently in contexts where the structural and relational divide between academic researchers and the communities they have targeted are most fraught, including Native American communities, resource-poor settings, underserved communities, and communities that arose around shared disease experiences.<sup>1-3</sup> While many have anecdotally lauded these boards for their importance in protecting communities from exploitation from research entities who have caused them harm in the past, there has been only piecemeal assessment of their effectiveness and impact towards these or other goals.<sup>4-10</sup> CABs do not currently have the authority or funding that comes from being required by federal or institutional regulations, like IRBs. While being outside the regulatory process grants them a level of freedom not shared by regulated oversight bodies, it does leave CABs with the burden of demonstrating their necessity and value to gain support and funding, rather than presupposing it. Empirical evidence of their multidimensional impact on research serves several purposes. It can demonstrate their current and potential impact on research so that institutional and research funders are more likely to support them. It can also serve as quality improvement insights so that CABs can improve and expand their own outcomes and ability to serve multiple stakeholders.

CABs are increasingly recognizing the importance of evaluating themselves and providing evidence of their impacts on both the research and the communities they serve. In 2009, an organized group of community based organizations in Flint, called the Community Based Organization Partners (CBOP) formed a CAB called the Community Ethics Review Board (CBOP-CERB) “to establish a community-level ethical protection entity led by local residents.<sup>11</sup>” The overarching goal of the CBOP-CERB is to review proposed and actual studies

taking place in the Flint area to ensure that they are community engaged and informed, benefit the community, are sensitive to the community's culture and needs, and the research results are disseminated to the community.<sup>12</sup> The CBOP-CERB is comprised of up to of 15 community residents, largely representing area community and faith-based organizations. Flint has a long history of community organizing and advocacy to improve conditions for the residents of the area, and the formation of the CBOP-CERB reflects this longstanding tradition of organizing and advocacy.

After a decade of performance and growth, the CBOP-CERB, as one of the most long-standing CABs in the United States, recognized the importance of conducting a well-designed evaluation for many of the reasons listed above. This led them to ask an academic and community partner (Cargill and Spencer) to form a collaboration and to apply for pilot funds to design and implement an evaluation to assess the CBOP-CERB's impact at the beginning of 2020. Unfortunately, due to the pandemic this funding mechanism was delayed, and the team reapplied for the funding in Spring 2021 and received it in the Summer of 2021. In the meantime, the CBOP-CERB worked to prepare themselves for evaluation in two ways. In Fall of 2020, members of the CBOP-CERB worked with expert health evaluators from the National Institutes of Environmental Health Sciences (NIEHS) to learn how to utilize their Partnerships for Environmental Public Health (PEPH) Evaluation Metrics Manual to better articulate their goals for their board in the form of metrics and logic models.<sup>13</sup> These logic models identified three key stakeholder groups with which the CBOP-CERB needed to evaluate their impact: researchers, Flint area residents, and CBOP-CERB members. The CBOP-CERB used these logic models to make their desired short and long-term impacts with each of these stakeholder

groups explicit. Although similar to the goals they previously articulated on their website, the logic models served to make these goals more concrete and measurable.

Afterwards, in the spring of 2021, the CBOP-CERB performed a quantitative community survey to gauge community interest in research and knowledge of CBOP-CERB activity within the research process. Knowing that the evaluation was on the horizon, they also asked whether respondents would be willing to participate in focus groups about the CBOP-CERB in the future. Thus, when this evaluation began in the late summer of 2021, the CBOP-CERB had created a helpful set of metrics and list of potential participants for us to utilize as a jumping off point for design and recruitment.

## **Methods**

The evaluation team approached the development of the evaluation materials in light of this prior work of the CBOP-CERB. Based on the logic models developed with the NIEHS, we focused on two of the three CBOP-CERB stakeholder groups, researchers who sent their studies to the CBOP-CERB, and the Flint area residents whom the CBOP-CERB intended to represent in their reviews. Using the short-term impacts articulated in the logic models, the co-PIs collaboratively developed the survey and focus group guide. The survey asked questions in three categories: Background questions (about the nature and stage of research at which they engaged the CBOP-CERB); Process questions (about their perceptions of the quality of the CBOP-CERB process of reviewing their research); and Impact questions (about the effect of CBOP-CERB feedback on their research). The survey utilized mixed methods, combining quantitative methods (likert scales, yes/no questions) and open-ended qualitative questions. For a copy of the survey, see Addendum A.

We divided the focus group guide divided into two sections: Part A: Experiences and thoughts about research taking place in Flint (not presented here but a priority for the CBOP-CERB) and Part B: Experiences and thoughts about the CBOP-CERB. Each part of the focus group began with a short presentation by one of the project PI's to introduce the issue (3-5 minutes) and then proceeded with an open-ended set of questions on the topic. The focus group guide was designed to be implemented in one hour. For a copy of the focus group guide, see Addendum B.

Both the survey and focus group guides were provided to the CBOP-CERB to make sure that they were achieving their evaluation goals. We then met and received feedback, after which both were finalized. Once the design of the study materials was complete, we submitted it to Saint Louis University's IRB and received exempt #2 approval (#32248).

Once we received IRB approval, we proceeded to recruit participants for each evaluation. The implementation of the investigator survey involved creating an anonymous online Qualtrics survey (~15 minutes) and offering it to any investigators who had utilized the CBOP-CERB since 2015. By working with the CBOP-CERB, we gained the contact information of 36 investigators who had utilized the CBOP-CERB in that time frame. They were emailed an invitation to participate in the survey along with the survey link. We followed up twice with our list to remind them of the invitation. Quantitative survey results were analyzed by computing mean scores and standard deviations for each Likert item, and raw numbers and percentages for each dichotomous item. Qualitative answers were analyzed for themes and patterns of response.

For the Flint area residents, we held six focus groups with a total of 39 participants. While we did not collect demographic data from our participants, we intentionally recruited to maximize diversity. We recruited from a church community, a senior center, a Latinx

community organization, a healthy food community organization, and a community health organization, among others. For more detail about our recruitment process, please see the accompanying manuscript in this issue. We did not exclude anyone who was willing to participate, although we ended up actively excluding people who signed on to Zoom but did not actively join the session.

Focus groups were held and recorded on Zoom, and subsequently transcribed by Zoom and cleaned and de-identified by our research assistants. The two PIs (Spencer and Solomon Cargill) as well as two research assistants (Curran and Spencer) conducted data immersion by reading and re-reading the transcripts and primary cycle coding to identify preliminary patterns and common themes from the transcribed focus group conversations<sup>14-15</sup>. After comparing insights, we developed a draft coding table with themes and subthemes found in the data. Transcripts were then divided and assigned to two team members, with no two transcripts being assigned to the same two members. Team members then applied the draft coding table to the transcripts, while simultaneously reflecting on the possible improvements, clarifications, or revisions to the coding table as the data was being analyzed. Coded transcripts were then combined and reconciled in conversation with all team members, and the coding table was finalized. The final step was to compare the results of our survey with the results of our focus groups for areas of corroboration or tension. The research team reflected on these areas and identified noteworthy insights about the relationships between the experiences of these two stakeholder groups.

## **Results**

### Investigator survey results

The investigator survey yielded 27 respondents out of 36 potential investigators (response rate 75%). While our survey was anonymous and didn't ask any specific questions about investigators or their research projects, we did inquire as to the background of the research coming into the CBOP-CERB, specifically when it came to the CBOP-CERB, in what stage it came to the CBOP-CERB and why it came to the CBOP-CERB. The respondents submitted their research to the CBOP-CERB between 2016 and 2021, with several submitting more than one study. As research can be submitted for community review at various stages, we asked about the stage of research of their submissions, finding that 40% (10) submitting at the pre-submission/writing stage, 20% (5) submitting during the writing stage prior to funding, 32% (8) submitted after funding but before implementation, and 8% (2) submitted during or after implementation. We received 18 open-ended responses to a question about why they had engaged with the CBOP-CERB. Of those, 12 indicated that they did it out of their own initiative (finding it valuable, wanting to improve community relationships, etc.), 5 were referred (often by community collaborators), and one was mandated to go to the CBOP-CERB by their grant.

The CBOP-CERB had both process evaluation and impact evaluation goals for our project. In the process section of our survey, we asked for feedback in the form of a 5 point Likert scale (1= strongly disagree; 5= strongly agree) regarding the CBOP-CERB review process, including their Support Intake Form, the presentation and Q&A with the CBOP-CERB itself, and the feedback and ultimate decision whether to endorse the project.<sup>16</sup> Overall results as averages and standard deviations are listed in the table below [See Table 1].

[Insert Table 1 here]

91% (21) of respondents found the intake form user-friendly, and 87% (21) found it good preparation for the CBOP-CERB meeting discussion. No respondents disagreed with the



statement that the scheduling of the CBOP-CERB meeting was convenient, and all agreed that they had enough time to present and discuss their study at the CBOP-CERB meeting. While there were differing opinions about the organization and the focus of the Q & A, all respondents found the questions posed useful and most found it actionable. If changes were required, investigators were mixed in their opinions whether the process to resolve them was clear. Open-ended responses suggested potential improvements to the CBOP-CERB process such as a written assessment/feedback, more follow-up and interaction before and after the review session, quicker turnaround, and clearer demarcation of what is necessary for the CBOP-CERB to endorse their research.

In addition to the process questions, the survey asked investigators about the impact of CBOP-CERB review on their research. See Table 2 for a summary of responses.

[Insert Table 2 here]

There was more divergence in these responses, with agreement ranging from very high (over 80%) in some impact areas but as low as 21% in other impact areas. As discussed below, some of these impacts are current expectations of the CBOP-CERB, while others were articulated in the logic models as aspirational impacts for the future.

To additionally evaluate impact, we asked investigators where they perceived their research on the Community Engagement Spectrum before and after engaging with the CBOP-CERB. For the survey item, we used a combination of the models of the Clinical and Translational Science Awards Consortium and Harvard Catalyst.<sup>17-18</sup>

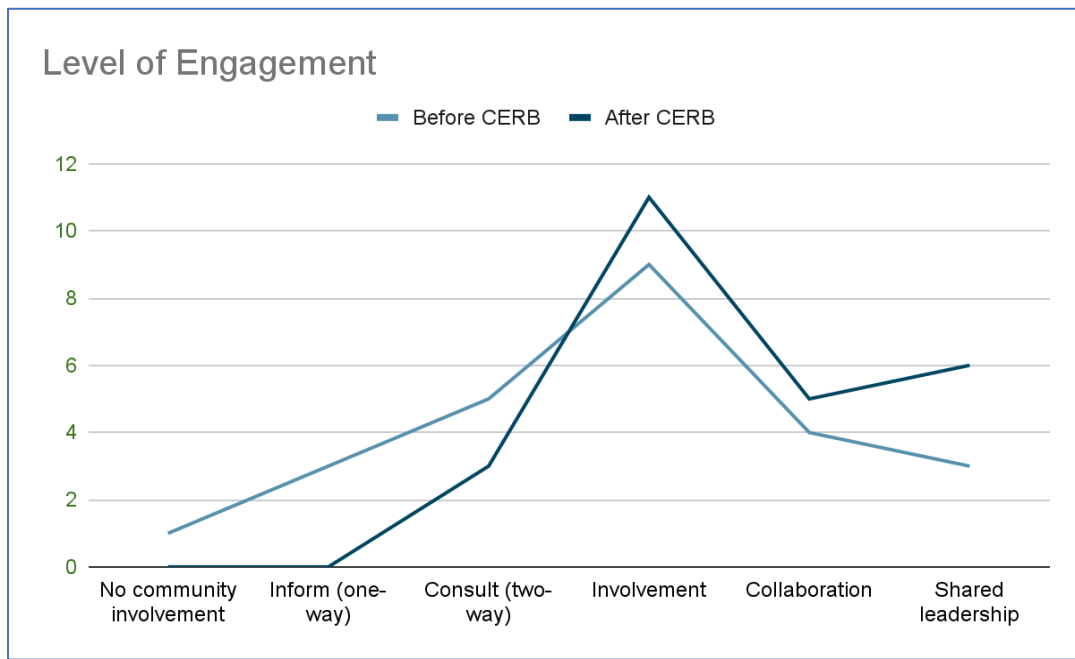


Figure1: Shift on the Engagement Spectrum

On a six point scale from 1 (no community involvement) to 6 (shared leadership), prior to engagement with the CBOP-CERB investigators reported an average of 3.84 (1.29 SD) which placed most between Consultation (3) and Involvement (4). After engaging with the CBOP-CERB, investigators reported an average of 4.56 (.98 SD) which placed most between Involvement (4) and Collaboration (5). Further, prior to the CBOP-CERB, 16% of researchers had no community involvement or one-way communication, and after the CBOP-CERB 0% had no community involvement or only one-way communication.

When asked in open-ended questions about the most meaningful contributions from the CBOP-CERB, respondents mentioned edits to materials to make them more appealing, understandable, and less stigmatizing, help with recruitment, help in understanding community needs and limitations, and help with aligning with community values. Suggested improvements

to increase the impact of the CBOP-CERB were more visibility, more diverse representation on the CBOP-CERB, more connection to community organizations, and the need to provide the CBOP-CERB with more resources.

### Community focus group results

The focus groups yielded a distinct perspective on the CBOP-CERB, but surprisingly had some views that overlapped with that of the researchers. After providing a brief presentation about the role and goals of the CBOP-CERB (from the logic model), we asked participants to reflect on how the CBOP-CERB could best achieve these roles and goals, and if there were other roles and goals they thought would be important for the CBOP-CERB to play. An important overall finding from these focus groups was that a vast majority of our participants had never heard of the CBOP-CERB. This result itself is an overarching impact evaluation, namely that there are significant subsets of Flint area residents that are not being (at least knowingly) impacted by the CBOP-CERB. The unfamiliarity of our participants with the CBOP-CERB also resulted in findings in the focus groups that were less about the current functioning of the CBOP-CERB, and more about how the CBOP-CERB could and should function, from their perspectives.

As most of our participants had not heard of the CBOP-CERB prior to our focus groups, most of their suggestions were couched in the form of suggestions, whether or not they reflected things the CBOP-CERB is already doing or achieving.

[Insert Table 3 here]

Overall, we identified 3 themes in the data that focused on their views about the CBOP-CERB. The first theme (Theme A) captures comments that described functions the CBOP-CERB could or does play. We divided these into three categories, functions that the CERB already does,

functions that are within its current mission but that it doesn't currently do, and functions that expand its scope. Many of the participants (names are pseudonyms) suggestions reflected functions that the CBOP-CERB already performs, such as providing researchers with a community perspective on community needs, screening or altering research coming in to Flint to be more beneficial and less risky to communities, and connecting researchers to community groups in Flint that could help recruit.

*I think that [the CBOP-CERB] is an excellent entity because you guys advocate for the community by trying to get a community perspective on what they should be looking for, because what they are looking for may not be what this particular community needs. And what I found through the CERB, you will tailor, try to fix what they're looking for, so that it can be beneficial for the people and the research.*

*It would be probably useful for the ethics review board, if anything, to make sure that the research that's being done matches up with the needs of the Community and make sure that, because I know it's about like reducing any kind of harm that would come from the research...*

Insofar as the CBOP-CERB's current functions align with the community participants' expected functions, this suggests that the CBOP-CERB's self-identified mission is aligned with the needs and expectations of its community members.

Other suggestions were within the scope of the CBOP-CERB's current mission, but not activities the CBOP-CERB currently conducts, such as an emphasis throughout the focus groups on the importance of dissemination of research results back to the community, and the role the CBOP-CERB could play in facilitating this.

*...if when a research project comes to the CERB and say it's a project that researchers want to do about food access, if the CERB could then connect that project with an organization like Edible Flint or other organizations, I think that bridges that gap of like how do we take it from research to action. So, I think if*

*the -CERB kind of broadened from a community IRB to really making the connections so that action could happen after the research is done.*

Another suggestion that appears within the scope of the CBOP-CERBs current functions is to build trust between the Flint area residents and research coming into Flint.

*I would like the CERB to be responsible for making sure that this is on the up and up, what they're saying that they're going to do is actually true; and, if I can have faith in the CERB, then I can have faith in the researchers that are coming through them.*

Finally, participants mentioned some functions that would expand the role and impact of the CBOP-CERB beyond what it currently sees itself doing. First, participants suggested that the CBOP-CERB actively attract, rather than merely receive and review, research in Flint.

Especially when mentioning research topics of interest to their communities, participants voiced a hope that the CBOP-CERB could play a role in identifying and bringing researchers in (or cultivating them from within the community) to do the research they wanted to see. Another possible CBOP-CERB role voiced by participants was as point of contact for Flint area residents if they have questions or concerns about the research they are approached with or participating in.

*...give somebody some additional information like this is not just us talking if you don't like it or you don't believe it or you don't understand it and follow up with these people then maybe you can get a better understanding or if you've got a complaint.*

Theme B captured the comments in the focus groups that centered around strategies by which the CBOP-CERB could increase visibility and buy-in from the community. While the CBOP-CERB arguably already has buy-in from a subset of the community, since most of our participants had not heard of the CBOP-CERB, they often discussed how to establish that buy-in from *them*.

The first sub-theme on this topic was focused on CBOP-CERB representation.

*You have to have people of trust and integrity at the table, but those are the people that give the group worth. When you have folks that look like us, talk like us, and then have the respectability from us, now you got something to work with, because now, you know which way the wind is going to blow, because that is what most of us are looking for, who's at the table.*

Another set of comments reflected an emphasis on communication from the CBOP-CERB about their process, standards, and the results of their work. Participants emphasized that they wanted to know how the CBOP-CERB evaluates research that comes to them, and how that has served to protect their community.

*...it's important not only that they know the CERB exists, but they need to understand the measure of rule that the CERB has A, and B what criteria they need to have like an outline or an idea of what the CERB actually can do, or does in the process.*

*...what can the CERB tell me it has done for my community thus far that's positive? And maybe we can start there. [...] can you give us some more details on the surveys that has happened in this community, that's affected this community that the CERB have approved or not approved, and things like that.*

The marketing themes of “branding” and “selling” the CBOP-CERB also emerged from our participants. Both were closely aligned with the previous point of making it transparent to the community what benefits the CBOP-CERB provides to them, and why an endorsement of research by the CBOP-CERB is meaningful.

*... if the CERB program had a stamp of approval that they could put on certain research studies that would go a long way, just to making it like this isn't just any research study, this is CERB approved. I think that type of marketing dynamic will be helpful to just put their name out there...*

*I feel like it would be good for the CERB, to be known so when researchers come in and they come and see you and they're vetted by you and they say we have CERB approval. And if the people know who CERB are, then they know the researchers are legit. I feel like y'all need a brand and people need to know that.*

Finally, theme C captured the recommendations from the participants on different modes of communication that could be utilized by the CBOP-CERB (or researchers) to reach out to the community, and when and where they are effective. The overarching insight was that diverse strategies need to be used, since people use different, and multiple types of communication to receive information in their community. Participants discussed the strengths and weaknesses of print media, social media, radio/TV, phone calls and texts, as well as community events and community organizations. No one method or strategy predominated in discussions, rather participants focused on how different demographics should be reached differently, but at the same time not to assume that one strategy will be the one “best” for any given demographic. For example, while our more senior participants tended to focus on getting information from the senior center newsletter and print media, several also used Instagram or Facebook to receive community information. Similarly, while they talked about how they tend to not respond to emails, they also tend to filter out phone calls and texts unless personally told through word of mouth to look there for something specifically.

The biggest emphasis from participants was about outreach to community events and community organizations, to spread information by word of mouth, at least at the outset of interactions. Examples mentioned included churches, block clubs, farmer’s markets, festivals, newsletters at senior centers, libraries, etc.

*As a board member of a local community organization, I think that we could really benefit from CERB reaching out to other community organizations and making their leadership aware of their presence and what they do and how they can benefit those organizations, by helping them to have a voice in research that is ongoing.*

### Areas of corroboration

While the perspectives on the CBOP-CERB with their two stakeholder populations differ, they are not entirely distinct. First, both researchers and the Flint area residents articulated a desire for clear criteria for endorsement. Making these criteria explicit would both give researchers a clear idea of how to design their research to optimize their relationship with the CBOP-CERB and the residents of Flint, as well as give the residents of Flint a clear idea of why they should trust the research that is endorsed by the CBOP-CERB.

Second, the results of both the focus groups and the survey emphasized the importance of the CBOP-CERB increasing its visibility in their communities. Researchers suggested more visibility in academic circles, while focus group participants suggested more visibility as an overall community presence.

A third point of corroboration between the survey and the focus groups was on the suggestion for increased diversity of the CBOP-CERB to represent and provide connections with the diverse Flint area residents. Several survey respondents desired help from CBOP-CERB members connecting them to community partners or community-engaged organizations in the area of their research interests. Similar ideas were voiced by focus group participants (discussed above). The emphasis on the increased representation and connection with a wider swath of community organization leaders arose often.

### **Discussion**



Findings from researchers who have utilized the CBOP-CERB and Flint area residents have numerous implications.. These implications apply not only to the CBOP-CERB, but to any community-based research review board that has similar goals to meet the needs of both researchers and their community stakeholders.

First, our approach suggests the feasibility of training CABs to develop logic models and then evaluating the board in light of them. While subjective feedback and theoretical commitments to community review are helpful, strong evidence of the impact of these boards, and where they need to be supported to improve their impact, can serve to justify their continued existence and growth.

Second, we learned that the CBOP-CERB does meet its primary goals with its investigator and community populations. From the survey, its process received predominately positive feedback, with respondents giving very positive (between 4 and 5 on a Likert scale) responses to process evaluation questions. In terms of impact, the CBOP-CERB's primary goal of aligning research with community values and giving community stakeholder feedback was perceived to be achieved by over 80% of respondents. More powerfully, the CBOP-CERB appears to have shifted the research that comes to them significantly toward community engagement on the Community Engagement Spectrum. Open-ended comments reiterated the value that researchers found in engaging the CBOP-CERB, and the improvements they saw in their research that resulted. Similarly, although most of our focus group participants had not heard of the CBOP-CERB, so could not speak to its performance directly, much of their articulated values and hopes for what the CBOP-CERB would achieve reflect the same mission and goals that the CBOP-CERB has already articulated for itself, such as providing a community perspective on research, making research in Flint more beneficial and less risky to the

community, and connecting researchers with community stakeholders. This underscores that the CBOP-CERB has a connection to the pulse of what the Flint area residents prioritize about research.

Third, we received extensive feedback on strategies for the CBOP-CERB to increase its impact, both with researchers and the community. That these were suggestions made for a long-standing and well-established community research review board indicates how challenging these suggestions may be to achieve for any CAB, and how central support and funding are to achieving them. These strategies were divided into two categories, those that would improve functions that the CBOP-CERB already holds itself to perform, and those that expand the functions of the CBOP-CERB. The first category contains strategies for increasing and intensifying their community presence and representation. Community outreach is hard work, and Flint (like most cities) contains diverse populations, age groups, cultures, religions, etc. Our focus groups participants suggested numerous strategies by which the CBOP-CERB could connect and recruit more Flint area residents, which could also inform other CABs on how to better achieve these goals. The other category contains strategies for expanding the functions of the CBOP-CERB in ways that would be meaningful to both the researchers and community stakeholders. These suggestions include process improvements like implementing a written feedback form, increasing their visibility to both academics and Flint, playing a more central role in attracting desirable research to Flint, and serving as a communication hub between researchers and community participants in research. They also could serve a capacity-building function to teach Flint area residents about research how to become collaborators or even implement research themselves.

The barriers to implementing these strategies are both practical and financial. The practical challenges of representing a diverse population are real, and our focus group participants provided numerous suggestions on how it can be achieved. On the other hand, all of these strategies would require the CBOP-CERB members and staff to increase both the time and resources currently devoted to achieve them. Both sets of stakeholders expressed a strong desire for the CBOP-CERB to expand its functions and services, which should serve to justify expanded financial and structural support of entities like these.

Finally, our study has certain limitations. While we had a high response rate for our investigator survey, allowing us to generalize to the CBOP-CERB's researcher population, the (relatively) low number of investigators to recruit makes the ability to generalize to other communities or CABs limited beyond general guidance. Likewise, while we met our recruitment goals for our focus groups, it would take a much larger study sample to generalize to the greater Flint area population. We do not claim that their views represent all of Flint area residents, although their intentional diversity in age, race, and other factors hopefully justifies them representing at least a subset of perspectives to be found in the Flint area. Finally, the fact that our focus group respondents had largely not heard of the CBOP-CERB makes our use of their data as an evaluation of the CBOP-CERB indirect at best. We cannot establish how well the CBOP-CERB is meeting the needs of community members without asking the community members who have engaged with it, although we can (and did) assess the alignment of the CBOP-CERB's values with those of our participants.

## **Conclusion**

By evaluating a long-standing CAB, this project introduces a novel way to assess the impact of CABs, as well as helpful result both for the CBOP-CERB as an exemplar, and for

other CABs who may want to implement similar evaluations and improvements. It provides feedback to the CBOP-CERB about the positive impact of their current program as well as opportunities for improvement. And finally, it makes the case for increased support for these important boards to both meet their current goals and expand their roles to benefit both researchers, communities, and the research system that depends on them both.

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18. Harvard Catalyst Community Engagement Program [Internet]. Available from: <https://catalyst.harvard.edu/community-engagement/ce/>

Tables

Table 1: Investigator Survey-Process results

Process Survey Question	Average agreement (S.D.) n = 23
The CERB intake form is user-friendly	4.48 (.77)
The documents provided by the CERB prepared me for the CERB meeting discussion	4.39 (.82)
The scheduling of the CERB meeting was convenient	4.34 (.77)
I had enough time to present and discuss my study at the CERB meeting	4.87 (.34)
The Q&A at the CERB meeting was organized	4.34 (1.02)
The questions posed to me in the Q&A were focused	4.65 (.76)
The questions posed to me in the Q&A were useful	4.70 (.62)
The written feedback from the CERB was actionable <sup>1</sup>	4.22 (1.02)

Table 2: Investigator Survey-Impact results

Impact Survey question (yes/no)	Count yes (%) n=23
The CERB helped me align my research with community values	20 (87%)
The CERB served as a CAB for my research project	5 (22%)
The CERB helped me get feedback from community stakeholders in the design of my project.	19 (83%)
The CERB helped me identify potential community stakeholders to be on the research team	12 (52%)
The CERB helped me establish relationships with community-based organizations.	7(30%)
The CERB helped me recruit participants for my research project.	8(35%)
The CERB helped me retain participants for my research project.	5(21%)

<sup>1</sup> The lower average here may be a reflection of comments in the open-text portion of the study that not all investigators were provided written feedback.

Table 2: Focus groups themes and subthemes

Theme	Subtheme
Theme A: Functions the CERB could/does play	Community perspective on community needs
	Screen/change research to be more beneficial/less risky to communities
	Attracting valuable research to Flint
	Disseminating for researchers (or helping researchers disseminate)
	Contact if participants have questions/concerns
	Build trust
	Functions (other)
Theme B: Strategies for more buy-in from community	Representation on the CERB board
	Endorsement of approved research/branding
	Communicate about standards/process
	Educate about what CERB has done (“sell it”)
	Strategies (other)
Theme C: Communication methods and who they reach	General advice (diverse, target groups, etc., continuous, transparent, how to not look like scam)
	Social media
	Print media (newspapers, newsletters, mail)
	Radio/TV
	Community events and Community organizations
	Phone/text
	Methods that don’t work
	Methods (other)
	Word of mouth
	Email