Local Health Departments Engaging in Policy Change to Achieve Health Equity: An Examination of the Foreclosure Crisis

By

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Abstract

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Early public health efforts in the United States addressed social conditions that contributed to poor health, with public health workers playing a role in large scale societal reforms, such as passing housing and sanitation laws, which led to diminishing deaths from infectious diseases. As chronic diseases became leading causes of death, public health research and practice became more focused on individual behaviors, widely thought to be the primary cause of chronic diseases. However, health inequities along the lines of place, race, class, and other forms or marginalization are still prevalent. A substantial body of research illustrates how social, political, economic, and environmental factors affect multiple health outcomes, including chronic diseases, and contribute to health inequities.

In public health practice, some local health departments (LHDs) and organizations that support their work have called for broader public health interventions that address social policies that contribute to health inequities in addition to providing direct services to individuals. With continued research and support, the approximately 2,800 LHDs nationwide can play a central role in reducing health inequities. However, engaging in this complex work necessitates new approaches, skills, frameworks, and organizational infrastructures for LHDs. The recent foreclosure crisis, which stands to increase racial and health inequities, provides a lens to examine whether and how LHDs can move from a rhetorical commitment to addressing social determinants of health (SDH) into actual public health interventions that reduce health inequities.

Through this dissertation, I examine LHDs' role in the foreclosure crisis through three related papers. My aim is provide insight into how LHDs responded to the deep and fundamental shifts in access to stable and quality housing and wealth created by the foreclosure crisis that disproportionately impacted African-American, Latino, and some Asian/Pacific Islander communities. Through all three papers, I incorporate a focus on challenges and approaches to addressing the racialized causes and outcomes of the foreclosure crisis. My overall aim is to help advance local public health practice within LHDs to more effectively target the causes of

health inequities, including gaining a better understanding of LHD approaches and needs related to addressing SDH through local policy.

In the first paper, *A National Survey on Local Health Department Engagement in Addressing the Foreclosure Crisis,* I describe the results of a national survey on LHD engagement in the foreclosure crisis, which includes LHD approaches to addressing foreclosure and barriers to engagement. Responses followed a diffusion of innovation pattern, with innovator, early adopter, early majority, late majority, and lagging LHDs. Respondents expressed a high level of interest in adopting innovative approaches to addressing SDH and described a need for models of how other LHDs are preventing or mitigating the impacts of foreclosure, especially through local policies.

In the second paper, *Adopting an Innovative Public Health Practice to Address Foreclosure: A Case Study of Alameda County Public Health Department*, and the third paper, *Policy Entrepreneurs, Agenda-Setting, and Communication: An Exploration of How a Local Health Department Engaged in Addressing the Foreclosure Crisis,* I describe findings from qualitative interviews with current and former ACPHD staff and partners. In the second paper, I identify factors that 1) differentiate ACPHD's innovative approach from traditional LHD activities; and, 2) contributed to ACPHD being an innovator among LHDs.

Finally, in the third paper, I focus on ACPHD's role as a policy entrepreneur in agenda-setting, including their communication approach. While the second paper focuses on how ACPHD developed into an innovative LHD in the area of local housing policy, the 3rd paper focuses on how in this role, ACPHD interacted in the local policymaking process. This case study also examines how the role of policy entrepreneur can be shared across two organizations (ACPHD and Causa Justa::Just Cause) and provides another way to conceive of entrepreneurism.

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I. Acknowledgements

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II. Introduction

In 1988, the Institute of Medicine (IOM) defined public health as "...what we, as a society, do collectively to assure the conditions for people to be healthy."[1] While health inequities have long been recognized in the public health field, views on the causes of these inequities have shifted throughout history, from a focus on population level reforms such as sanitation and labor laws during the industrial revolution, to individual behaviors, to a growing recognition that the field must return to addressing the conditions, such as the political, environmental, economic, and social contexts, that influence health if there is to be marked changes in the stark disparities that exist based on race, place, class, and other forms of marginalization.[2–8]

As part of a complex United States public health system, the approximately 2,800 local health departments (LHDs) across the nation are the government agencies charged with maintaining, protecting, and ideally improving the public's health in many communities.[9] However, similar to many public health institutions, the funding and support for LHDs, as well as their practice, has centered on addressing individual behaviors or treating individual needs. While these services are often critical for overall population health, and especially for communities bearing the brunt of health inequities, they do not address the underlying structures and systems that create differential access to resources for health and exposures to harm. Additionally, research, as well as lessons from communities organizing to address negative health outcomes, demonstrate the role of power in distributing these resources and harms across the population.[4,10–16] While there are multiple approaches to rectifying these inequities, because power often manifests through policy decisions, which in turn, can provide or limit access to health producing resources or cluster health-harming risk factors in low-income communities of color, efforts to achieve health equity must include policy change.

Recognizing the need to address social factors that affect health, as well as power differentials that distribute access to these social factors, many LHDs are moving towards incorporating a focus on the social determinants of health (SDH) into their practice while also seeking to understand how power is structured by race, class, place, and other forms of marginalization.[6,7,17–21] This is challenging work that demands an evolution of frameworks, infrastructure, partnerships, strategies, and many other factors within LHDs. While there is substantial research on the causes of health inequities, research on how LHDs can be part of the solution is sparse in comparison.

Thus, this research project is an examination of LHDs' role in addressing the root causes of health inequities through a focus on their engagement in the foreclosure crisis. After decades of policies and practices, including racial segregation, deregulation of financial markets, and the targeting of subprime loans to communities of color, a wave of foreclosures hit the U.S., starting in 2006.[22–27] Foreclosures are directly related to two SDH—stable, quality housing and wealth—and intersect with numerous others, such as disrupting education, jobs, social networks, and transportation, and disproportionately impacting low-income communities of color that already faced barriers to health.[28–33] Foreclosures increase numerous health risks,

such as stress and depression, and have been linked to multiple poor health outcomes, including hypertension, heart disease, and suicide.[28,29,31–34]

Given the magnitude of the foreclosure crisis and related health impacts and the role of LHDs in addressing emerging threats, it is important to understand if and how these organizations engaged in addressing foreclosures. While contexts vary across the country as well as across SDH, this may also provide insight into effective strategies and challenges for LHDs addressing other SDH. Thus, this research contributes to both public health research and practice by assessing LHD engagement in the foreclosure crisis and by providing a case study of one LHD, the Alameda County Public Health Department (ACPHD) in California, that has been involved in local housing and foreclosure policy since 2006.

Dissertation Project

The overarching goal of my research is to explore LHDs' role in addressing health inequities. While there are multiple approaches LHDs can take in their work on health inequities, my focus in how they can address SDH through local policy in partnership with resident-driven community based organizations. To narrow this general area of interest to fit within the scope of a dissertation project, I am focusing on the foreclosure crisis for several reasons. One, it is a critical public health threat connected to multiple SDH that negatively impacts health and stands to widen health inequities. Next, there is already a strong research base connecting housing, wealth, and foreclosure to health, but there is a lack of research on how LHDs have reacted the crisis, including barriers to engagement and case studies of actions they have taken. Additionally, while the origins of the crisis span decades, the rise in foreclosure rates and resulting health consequences occurred in a discrete time period, providing a clearer period of study than ongoing crises in other SDH. Finally, while the findings of this research may not directly translate to other SDH, it is likely that there are some findings from this research that are applicable across SDH, or that can inform future research and practice-based interventions.

To accomplish these research goals, I seek to address the following research questions through three papers:

1) How did LHDs throughout the U.S. react to the foreclosure crisis as a public health issue?
2) How is ACPHD's approach an innovation in addressing health inequities as compared to traditional LHD public health practice? What factors contributed to ACPHD being an innovator among LHDs? What are the implications for other LHDs?
3) How did ACPHD engage in local policymaking processes related to foreclosure? What role did they play? What are perceived outcomes from their engagement? What are the implications for other LHDs?

Paper 1—A National Survey on Local Health Department Engagement in Addressing the Foreclosure Crisis

The objective of this paper is to gain insight into how LHDs in the U.S reacted to the foreclosure crisis as a public health issue, including barriers to engagement. Responses from a national survey followed a diffusion of innovation pattern, with innovator, early adopter, early majority, late majority, and lagging LHDs. Respondents expressed a high level of interest in adopting innovative approaches to addressing SDH and described a need for models of how other LHDs are preventing or mitigating the impacts of foreclosure, especially through local policies. Thus, Paper 1 provides a rational for examining an innovator LHD, which is the basis of Papers 2 and 3. While theoretical frameworks related to health inequities, structural racialization,[a] and political science informed the development of this research project, the diffusion of innovation focus emerged from the data and influenced the subsequent papers by adding an additional theoretical perspective to the research.

This research, coupled with other resources on LHDs addressing health inequities, indicates that LHDs may be on a continuum in their approaches relating to health equity.[4,6–8,36–38] At one end of the continuum, more traditional public health programs include providing services to individuals, monitoring diseases, controlling infectious disease outbreaks, and preparing for emergencies. In building a public health practice more focused on health equity, LHDs are expanding their data capacity to include less traditional public health indicators, such as data on housing, and using approaches that better elucidate disparities, such as GIS mapping. LHDs are also involved in changing norms and organizational infrastructure through internal capacity building initiatives, such as involving staff in discussions about racism and classism, which may be occurring at the same time as the expanded data collection.[8,38,39]

As LHDs adopt a SDH framework into their focus, a challenging next step is moving from rhetoric and describing the role of SDH in creating health inequities, to action. Expanding these actions into initiatives that are institutionalized and supported, as well as connecting this work to more traditional programs and services within an LHD to develop a more comprehensive departmental strategy to addressing health inequities, is at the other end of the continuum. Based on the survey results, ACPHD appeared to be at this end of the continuum, having engaged in several years of policy work on housing in addition to several other initiatives focused on health equity. Survey responses also indicate that multiple LHDs are progressing across the continuum and have displayed interest in advancing the work of their LHD towards a practice more explicitly focused on health equity. Thus, the case study of ACPHD is an intentional attempt to increase the rate of adoption of innovative health equity practices within LHDs across the country.

[a] **Structural racialization** is defined as, "…the set of practices, cultural norms, and institutional arrangements that both reflect and help to create and maintain race-based outcomes in society. Because racialization is a set of historical and cultural processes, it does not have one particular meaning. Instead, it describes conditions and norms that are constantly evolving and interacting with the sociopolitical environment, varying from location to location as well as throughout different periods in history.[35]

Paper 2—Adopting an Innovative Public Health Practice to Address Foreclosure: A Case Study of Alameda County Public Health Department

This paper presents a case study of ACPHD's approach to addressing foreclosure based on interviews with current and former ACPHD staff and partners. Based on theoretical frameworks related to health equity, I identify factors that differentiate ACPHD's innovative approach from traditional LHD activities. Next, utilizing diffusion of innovations theory and research, I describe factors that contributed to ACPHD being an innovator among LHDs and facilitated their adoption of an innovative health equity practice. While this paper provides a summary of ACPHD's foreclosure-related policy work, the primary focus is on organizational and contextual factors related to ACPHD's development of an innovative approach to addressing foreclosure and housing. This includes a discussion of how other LHDs may be able to address some of these same factors to increase their ability to adopt innovative approaches to addressing SDH.

Paper 3—Policy Entrepreneurs, Agenda-Setting, and Communication: An Exploration of How a Local Health Department Engaged in Addressing the Foreclosure Crisis

This paper also includes data from interviews with ACPHD staff and partners, but focuses on how as an innovative LHD, ACPHD functioned in local policymaking processes. While I initially set out to focus primarily on ACPHD's communication approach, as previous research has demonstrated the challenges of communicating about health equity and the need for examples, the study findings indicated the ACPHD's communication was interconnected to the role they played in local policy work and that there were aspects of this role worth presenting. Data indicated that their role aligns with political science theory on bureaucratic policy entrepreneurs and their influence on the agenda-setting process. However, the data also indicated an adaption of this theory, in that while ACPHD demonstrated multiple qualities of a policy entrepreneur, the full realization of this role was in partnership with the community-based organization Causa Justa::Just Cause. Thus, this paper indicates that a shared policy entrepreneur role may be one approach for LHDs engaging in local policy related to SDH.

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III. A National Survey on Local Health Department Engagement in Addressing the Foreclosure Crisis

Katherine Schaff, MPH, DrPH(c)

ABSTRACT

Objectives: Gain insight into how local health departments (LHDs) in the United States reacted to the foreclosure crisis as a public health issue, including barriers to engagement.

Methods: Online survey that included closed and open-ended questions sent to U.S. LHDs.

Results: There were 166 complete survey responses from 36 states. While respondents reported challenges to this work, 28% said their LHD had engaged in work related to foreclosure and 30% believed their LHD should work on foreclosure. During qualitative data analysis, three domains emerged: 1) ***impacts of foreclosure*** 2) ***perceived role of LHDs in addressing foreclosure***, which ranged from those who saw no role for LHDs to those who saw addressing social determinants of health, including foreclosure, as core to LHDs' work; and 3) ***challenges and barriers to addressing foreclosure***, which includes: data issues; foreclosure being a complex and new issue with few models for LHD intervention; and lack of resources (people, funding, skills).

Conclusions: The responses follow a *diffusion of innovations* pattern, with innovators taking steps to address foreclosure through varied approaches and early adopters, early majority, and late majority LHDs taking steps or showing interest in addressing the foreclosure crisis. There are both pragmatic and philosophic factors that influence where LHDs are within the diffusion of innovation categories; thus, support, resources, and funding for LHDs to engage in work on foreclosure, housing, or other social determinants of health should address both of these areas. Supporting and disseminating the work of LHD innovators, as well as addressing challenges for all groups will help more LHDs address foreclosure as a root cause of health inequities. Specific recommendations include: connecting LHD clients undergoing foreclosure to staff or tenants groups working on policy; engaging environmental health staff involved in mitigating the impacts of foreclosures through policies focused on health equity; and understanding more about the challenges LHDs have in collecting and analyzing local data related to foreclosure and social determinants of health.

INTRODUCTION

The foreclosure crisis that began in 2006 drastically reshaped access to housing and wealth in the U.S., with widespread and well-documented health impacts. While some local governments took action to stem the number of foreclosures or mitigate their impacts, there has been little research on whether and how local health departments (LHDs) became engaged in addressing foreclosures as an issue that affects community and individual health. Although resources exist to assist local governments in addressing foreclosure, many do not outline a specific role for LHDs, including how LHDs can engage in changing or creating policies related to foreclosure.[1–3] Housing instability and related stress have demonstrable negative health effects and a growing body of research describes the foreclosure crisis as a threat to health.[4–9] As foreclosures affect health and widen health inequities, LHDs nationwide can play a larger role in advocating for policies that address the causes or mitigate the impacts of foreclosure. To better understand the role the LHDs can play in future foreclosure prevention and response, this study examines how LHDs throughout the U.S. reacted to the foreclosure crisis through a national survey. This paper summarizes the findings from the survey, provides recommendations, and suggests areas for future research.

BACKGROUND

The foreclosure crisis, public health, and local health departments

In 2006, foreclosure rates began to increase rapidly across the United States, disproportionately affecting African-American, Latino, and some Asian/Pacific Islander communities.[10–16] A homeowner going through foreclosure or a renter whose landlord undergoes foreclosure faces housing instability, a disruption of social networks, and increased financial burden – all of which are associated with negative physical and mental health outcomes, such as hypertension, heart disease, and depression.[5–9,17–19] Communities with high rates of foreclosure often face elevated rates of violent crime and associated poorer health outcomes compared to communities with fewer foreclosures.[8,9,7,17]

In addition to the direct health impacts from foreclosure, as home ownership is the main source of wealth for many people, loss of wealth through foreclosure affects health outcomes.[20–22] Wealth inequity is also linked with poorer health, with more unequal societies experiencing worse health outcomes across the population than more egalitarian societies.[23] Not only are people of color at higher risk of negative physical and mental health outcomes directly related to foreclosure, they are also affected by a staggering loss of wealth, which in turn, affects health. By 2006, subprime loans generated one trillion dollars for the banking industry, while people of color experienced a loss in wealth of an estimated 164 to 213 billion dollars from 2000 to 2008 – the greatest loss of wealth to communities of color in modern U.S. history.[10] This massive redistribution of wealth and increasing wealth inequity portends not only poorer health for the current generation, but for future generations.[24,25]

Across the country, LHDs are charged with maintaining and protecting the public's health from imminent threats.[26] As the foreclosure crisis has emerged as a threat to public health, some LHDs are engaging in local policy change, such as advocating for vacant property registration

ordinances, which can mandate that banks maintain vacant properties and clean up blighted properties.[8,9,27] According to the National Association of County and City Health Officials (NACCHO) 2013 LHD profile, LHDs range in size from less than five full-time staff (15% of profile respondents) to over 200 full-time staff (6%); thus, the capacity of LHDs to engage in the foreclosure crisis will vary.[28] However, it is possible that some of the nearly 2,800 LHDs nationwide can play an important role in: supporting or leading local policy efforts to address foreclosures, strengthening policies by assessing long-term health impacts of policy decisions, and increasing support of policies by engaging clients, partners, and elected officials. However, we currently know little about LHD staff attitudes towards foreclosure as a public health issue, their knowledge of its health effects, or their attitudes toward and ideas about the role that LHDs might play in addressing foreclosure.

The foreclosure crisis, health inequities, and local health departments

In addition to negative health impacts, the foreclosure crisis stands to increase health inequities[a] between population groups. A substantial body of research illustrates how social, political, economic, and environmental factors affect multiple health outcomes and contribute to health inequities.[20,21,29–35] As the foreclosure crisis has its origins in segregation and is a continuation of decades of policies that negatively affect communities of color and lower income communities, it stands to exacerbate already large and ingrained racial and class inequities in health.[10–12,14–16,36] john powell[b] uses the terms structural racialization to describe both the causal factors and outcomes that contribute to racial inequities in health:

> By racialization, I refer to the set of practices, cultural norms, and institutional arrangements that both reflect and help to create and maintain race-based outcomes in society. Because racialization is a set of historical and cultural processes, it does not have one particular meaning. Instead, it describes conditions and norms that are constantly evolving and interacting with the sociopolitical environment, varying from location to location as well as throughout different periods in history.[37]

In public health practice, some LHDs are working towards broader public health interventions that address social policies, including the underlying structural marginalization and racialization, that influence health inequities.[22,38–41] Entrepreneurial LHDs can play an effective role in shaping policies at the local level, leading to better health outcomes. The recent foreclosure crisis offers an opportunity for the public health community to act in a way that might address structural determinants of health, including structural racialization, rather than merely identifying them. However, engaging in this complex work necessitates new approaches, skills, frameworks, organizational infrastructure, and communication strategies for LHDs.[38–42]

This research assesses how some LHDs reacted to the foreclosure crisis as a first step in articulating a set of best practices that could encourage more LHDs to apply a public health lens to policy events affecting their populations. While the results are not generalizable to all LHDs

[a] Whitehead defines **health inequities** as differences in health that are "unnecessary and avoidable but, in addition are also considered unfair and unjust."[29]

[b] Professor john powell uses all lower case letters in his name.

in the U.S., they provide insight into whether LHDs engaged in addressing the foreclosure crisis, what barriers to engagement LHDs experienced, and—for LHDs that did engage—what actions they took. In addition to providing information on LHD engagement in the foreclosure crisis, the survey results may also illustrate barriers and opportunities for LHD engagement in addressing other social determinants of health,[c] such as education, criminal justice, or transportation. Further research will be critical in understanding the role LHDs can play in using policy change to address social determinants of health to achieve health equity, including examining successful initiatives.

Theoretical frameworks

Several theoretical frameworks have guided this research, including the development of the research questions, survey, and data analysis approach. Krieger's ecosocial theory and Hofrichter's framework for how social injustice becomes embodied in differential disease and mortality rates provide explanations for how health inequities are created and perpetuated, focusing on the roles that structures, systems, and policies have on population level health.[30,31,34,44] Based on these frameworks, work to eliminate health inequities must include an understanding of and strategies to address community level impacts and their underlying causes. This includes viewing foreclosure as a social factor that has disproportionately affected communities of color, which in turn, contributes to health inequities. While these frameworks include a focus on racial health inequities, john powell's description of structural racialization provides a more detailed framework for assessing the racialized and intersectional causes and outcomes of the subprime lending crisis, as well as a lens to assess whether LHDs' policy and communication strategies relate to racial equity.[37,45–47] Finally, there are several theories from political science and public policy literature that provide theoretical grounding on how bureaucratic governmental organizations, such as LHDs, can play a role in policy change, which may lead to a reduction in social inequities and resulting health inequities.[48–51]

Survey responses indicate that LHDs' work related to foreclosure follows a pattern described in the diffusion of innovations theory. From the field of communications, this theory outlines how new ideas, practices, or projects are adopted. This includes five categories of people or organizations in terms based on how rapidly they adopt innovations: innovators, early adopters, early majority, late majority, and laggards.[52] There is extensive research in public health, political science, education, and other fields on utilizing this theory to design effective methods of supporting those in each category in adopting innovations.[53–56]

METHODS

In 2014, I conducted a survey of LHDs in the U.S. to understand how they reacted to the foreclosure crisis during the time period of 2006 to early 2014. Using Qualtrics, I created and pilot-tested an online survey that included questions regarding: (1) perceptions about whether the foreclosure crisis affected the health of people served by the health department; (2) whether the health department had engaged in work in response to the foreclosure crisis; (3)

[c] "The **social determinants of health** are the conditions in which people are born, grow, live, work and age. These circumstances are shaped by the distribution of money, power and resources at global, national and local levels."[43]

how many staff were involved; (4) what types of actions the health department engaged in related to the crisis; (5) barriers to addressing foreclosure as a public health issue; (6) perceptions about whether LHDs should engage in addressing the foreclosure crisis; and (7) demographic information about the respondents and their health department. The survey included skip logic; thus, staff from LHDs that had engaged in work related to the foreclosure crisis received some different questions than staff from LHDs that had not engaged.

The survey was open from February 19 to March 15, 2014. I solicited interviewees via numerous public health listservs, regional public health associations, state associations of county and city health officials, the NACCHO LHD Index, and personal contacts in an attempt to reach all LHDs in the U.S.[57] To increase the response and completion rate, respondents could participate in a drawing for one of two $25 giftcards. More than one staff person from a LHD could fill out the survey for several reasons: I wanted to capture different perceptions amongst staff; staff may know about different work happening within the LHD depending on their job position and how large the health department is; and I was focused on gathering a wide range of perceptions from staff rather than statistically generalizing responses to all LHDs.

I used Qualtrics for analysis of close-ended questions and Dedoose to code open-ended questions with an inductive/deductive coding approach. Specifically, I started the deductive coding process with *a priori* codes related to my theoretical frameworks,[58] but also added and modified codes throughout analysis to capture emergent themes in the collected data. I worked with another researcher in the University of California, Berkeley's Doctor of Public Health Program to achieve intercoder agreement, which "requires that two or more coders are able to reconcile through discussion whatever coding discrepancies they may have for the same unit of text."[59] Because the survey responses were brief, the other coder and I were able to discuss the majority of survey responses through several iterations of coding separately, comparing codes, resolving differences until both coders agreed, adapting codes accordingly, and developing the final codes and codebook.

RESULTS

I collected 166 completed surveys from 36 states, although some respondents chose not to answer specific questions. Of the respondents, 28% said their health department had engaged in work related to the foreclosure crisis, 7% were planning on engaging in work related to foreclosure in the next year, and 65% had not engaged and did not plan on engaging in work related to foreclosure (see Table 1). Of 160 responses, 30% believed their LHD should work on foreclosure, 46% thought their LHD should not engage, and 24% selected "other" with the option to provide additional comments (see Table 2), many of which are described in the "Challenges" section below. There were six responses from LHD staff whose health department had engaged in addressing foreclosure but thought that they should not focus on this issue. Reasons included: it not being core to public health; staff not being property trained to address foreclosure; the foreclosure crisis subsiding in their jurisdiction; a lack of resources; and that banks should be responsible for maintaining foreclosed homes.

Forty-three LHDs answered the question about how they engaged in addressing foreclosures (Table 3). The most common ways of engaging include: meeting with other city and county agencies to discuss and plan responses to the foreclosure crisis (44%) and communicating with community organizations that are addressing foreclosure (40%). This was followed by advocating for local polices related to foreclosure (35%) and reaching out to local banks and finance groups (33%). Of respondents whose LHD was engaged in foreclosure work, the majority (64%) said there were less than 5 staff working on the issue (Table 4).

In the analysis of the qualitative data, several broad domains emerged: 1) impacts of foreclosure; 2) perceptions of public health's role in addressing foreclosure and other social determinants; and 3) challenges to addressing foreclosure as a public health issue. One important finding is that there is wide variation in responses across each of these three domains, indicating that within the LHDs surveyed, there are divergent views about foreclosure and health and LHDs' roles in addressing this issue.

1. IMPACTS OF FORECLOSURE

There are already numerous studies connecting foreclosures to negative health outcomes;[5–9,17,18] thus, the relevance of the survey findings relate more to LHD staff perceptions of these impacts rather than providing new information about how foreclosures affect health. Forty-seven percent of respondents said that the foreclosure crisis affected the health of people in their jurisdiction while 33% responded that it had not affected the population they serve (see Table 5). In terms of foreclosure not affecting the population, respondents described situations ranging from: serving those in rural Appalachia who owned property but were still very poor; working in areas that had high numbers of second homes for wealthy residents; having other social determinants, like factories closing and unemployment that were more pressing; having industries that kept a high number of people employed in the area; being unsure if it was affecting their population without data; and having a jurisdiction with higher numbers of renters than homeowners, although several studies have shown the detrimental impact foreclosure can have on renters.[60,61] Another 19% provided an answer in the "other" category. In open-ended questions, respondents described impacts such as:

A. Health outcomes: Like much of the research on foreclosure and health, respondents also saw negative health impacts in their communities, including: displacement and destabilization of families; abandoned properties that create health hazards for neighborhoods; homelessness; lack of access to food and medical care because of costs of foreclosure and alternative housing; increased stress and mental health issues; and increased use of clinic services. Some noted that children, elderly, and communities of color faced the worst impacts. Some respondents stated that renters are in a precarious position that can lead to negative health outcomes because as landlords are foreclosed on, they face poor or no property management or illegal evictions. Others stated they believed renters in their area were not affected and that the crisis mostly impacted homeowners.

B. Community level impacts: While fewer respondents discussed community level issues than individual health concerns (21 vs. 58) several respondents provided insight into

population level impacts. This includes the foreclosure crisis decreasing property tax revenues, which in turn affects services they and other government agencies can offer; affecting access and affordability of housing throughout their jurisdiction; creating a "bonanza for developers and realtors" accompanied by urban renewal strategies that have historically disadvantaged communities of color; and as one respondent stated, the crisis "disproportionately impacted low income people of color and left entire neighborhoods devastated and struggling to recover from associated blight and economic disinvestment." Fewer responses in this area may indicate that staff have a better understanding of individual health outcomes related to foreclosure and that community level impacts are less clear.

2. WHAT IS THE ROLE OF LHDs IN ADDRESSING FORECLOSURE?

Answers to multiple questions throughout the survey provide insight into perceptions about whether LHDs should have a role in addressing the foreclosure crisis, and if so, what that role should be. Responses ranged across a spectrum of eight levels of engagement, from LHDs having no role in addressing foreclosure to describing addressing foreclosure as a core function of LHDs. There were no clear patterns in terms of geographic location, size of health department, or staff positions. For example, health officers and directors and well as clinic and individual service providers responded across the spectrum. While specific staff positions were not over-represented in any category from "no role" to "core public health," there was a more diverse range of staff positions in the respondents who described LHDs as having a central role in addressing foreclosure, including: health officers and directors, program managers, planning analysts, public information officers, social workers, clinical services managers, policy associates, and housing coordinators. This may indicate that LHDs that have the capacity to have more specialized staff are more likely to see a role for LHDs in addressing foreclosure. However, it's possible that this is just an artifact of who self-selected to answer the survey.

One potential area of difference for respondents who described LHDs as having a clear role in addressing foreclosure is many have been active in regional, state, or national coalitions, advisory committees, and other types of professional discussions on health equity. If there is an association between engaging in these networks, it's possible these connections expose them to current research and resources on social determinants of health, examples of how others are addressing social determinants, and continued opportunities for professional development related to health equity. Or it may be that LHD staff that are interested in health equity are more likely to seek out opportunities to connect to related networks. However, as the survey did not specifically ask about professional affiliations, this is an area for further research.

The eight levels of engagement are below. Excerpts can be in more than one category; for example, a response could be coded as pertaining to "environmental health" and "partnerships."

A. No role: Eight respondents described how they do not see a role for LHDs in addressing foreclosure, including many who see it as something other agencies or organizations, such as Social Services, housing authorities, or banks should address. For example, one

respondent wrote, “It's not a part of our mission nor is it considered core public health. Our hope this issue would be addressed by other, more appropriate agencies.” Another stated that LHDs should not work on foreclosure because “It's beyond the scope of our work; a broad community issue that would require more than the health department to work on the problem.” One respondent wrote that they should not work on it because the state health department had not brought it up as an emerging public health issue. While two additional respondents saw a plausible role for some LHDs, they stated that there was no role for their specific LHD and that LHDs need flexibility to determine priorities based on local context, and there may be more pressing issues, such as unemployment or a lack of affordable housing in their area, they need to focus on.

B. Unclear role: Fourteen respondents indicated that while LHDs could have a role, it is unclear what that role should be. Responses included “I guess I am not clear on what we could possibly do” and “It is unclear as to the role we would play. We don't have the tools to prevent or mitigate foreclosure though it undoubtedly has an impact on the population we serve.” Another stated that they[d] wanted to get involved, but had not determined their role yet: “We are just beginning to explore ways to more directly address upstream, root causes for some of the health challenges we see. Public health in general is upstream, but we are trying to determine just how far upstream we should go.” These responses relate to the challenge of “No Models” described in the Challenges section.

C. Connecting people to services, healthcare, and case management: Thirty-five respondents discussed how their LHD already was providing or could provide services to those undergoing foreclosure or connect them to case management around housing-related health issues, such as connecting homeless clients with housing options; connecting clients facing foreclosure-related stress to programs to prevent child abuse and suicide; connecting people to primary, mental, and dental care; connecting clients to housing assistance offered by agencies outside the health department; expanding services to low-income families; and connecting families who have not previously needed assistance to programs such as Women, Infants, and Children (WIC).

D. Addressing environmental issues: Forty-seven respondents discussed environmental health activities as being a central role for LHDs in addressing foreclosure. These responses focused on mandated and regulatory activities related to environmental hazards, including nuisances related to abandoned properties, such as increased: rodent and wildlife complaints; growth of weeds; abandoned debris and trash; sewage and septic tank issues; and unsafe places for teens and homeless people to gather and sleep. Many responses mentioned that LHDs are mandated to address these issues or that regulatory codes outline a clear role for the health department. It’s important to note that LHDs have diverse structures throughout the country.[62] In some localities, the environmental health division is

[d] As I did not ask respondents to identify their gender on the survey, and to protect the identify of respondents, I refer to all respondents with the pronoun “they.”

part of the local public health department; in other jurisdictions, they are separate organizations. Thus, LHD structure could influence respondents' perceptions of LHDs' role.

E. Conducting assessments: Nine respondents described community assessments or data analysis as important aspects of LHDs' role in addressing foreclosure. This includes: conducting community assessments and surveys; participating in local or regional housing assessments; mapping homeownership; and conducting needs assessments. One LHD created a report that included maternal and child health issues related to high rates of foreclosure in neighborhoods. Another LHD is gathering data on all housing needs, including foreclosure. One LHD participated in a regional Housing Needs Assessment to determine the housing needs of low-income residents. Some respondents described prioritizing other issues instead of foreclosure based on specific data, such as a Community Health Assessment, while others stated they did not think it was an issue in their area, although they did not explain how they came to this conclusion. Several respondents mentioned that data can be used to educate others, although it was not clear whom they wanted to educate and what actions they wanted them to take.

F. Partnering with other organizations: Twenty-two respondents described how their LHD role includes partnering to address foreclosure. Partners range from banks to state attorney generals to community based organizations, and LHDs play diverse roles, from leading the work to participating if asked. For example, one LHD was working with an environmental group to apply for a grant to address affordable housing. Another LHD also ran a Federally Qualified Health Center and had "deep connections to community partners and code enforcement" which they described as allowing them to be "uniquely situated to work as a team on foreclosure." Others stated "I think we are better in a supporting role, working with other agencies whose primary mission is addressing this issue." Another noted, "It depends on other factors. If we were putting together a City-wide team of key departments, health should be part and I would welcome this opportunity." Excerpts that were coded as "partnering with other organizations" were most likely to be co-occurring with "addressing social determinants of health" (9 excerpts) and "addressing environmental health issues" (7 excerpts) out of the other roles described in this domain.

G. Addressing social determinants of health, including foreclosure*:* Thirty respondents described their belief that LHDs should address social factors that affect health, like foreclosure and housing. This included specific examples, like policies they were engaged in or want to engage in, or general language such as "Public Health is where folks, live, work, and play," and "Public health must address public health issues where they originate." Another respondent stated "The foreclosure crisis was the result of systemic exploitation, risky behavior by empowered institutions, and targeting of low-income people of color, all of which contribute to devastating short- and long-term health outcomes for entire populations of people." In contrast to those who stated that there was no role in addressing foreclosure for LHDs, others saw it as a core part of public health: "It has been a social crisis involving various community disruptions, stresses and direct harms which puts individuals and communities at increased risk of health problems. In a sense, it is a community disaster.

Responding to such disasters and crises to preserve and restore health is a core public health function." Others spoke more broadly of housing issues: "I think we should engage in the full array of housing issues that result in displacement, whether that be rising rents, evictions, foreclosures, or the lack of affordable, family sized units being built."

Another notable finding is that many respondents included terms such as "economics," "low-income communities," "poverty," or "certain communities," which indicates that their understanding of the foreclosure crisis includes class and/or socioeconomic status analysis. However, only one respondent used the term "communities of color," which was the only comment in this category that explicitly raised the disproportionate impact the foreclosure crisis had on African-American, Latino, and some Asian/Pacific Islander communities.

3. CHALLENGES AND BARRIERS TO ADDRESSING FORECLOSURES

Table 7 includes responses from the 42 respondents who said that their health department made a conscious decision to not engage in addressing the foreclosure crisis. Reasons why they think their health department has not engaged include: not having funding to hire staff to work on foreclosure (60%); prioritizing other issues through strategic or community planning (45%); not having models for addressing foreclosure (40%); current staff not having time to work on foreclosure (40%); current staff not having the skills to work on the issue (33%); foreclosures not affecting the population their LHD serves (29%); and not seeing it as the health department's role (24%).

Many of the open-ended answers throughout the survey reiterate the same challenges, providing more context and description. Through coding, I identified five main challenges or barriers.

A. Politics: While only three responses are coded as "politics," they are worth noting as clear barriers to conducting work on foreclosure that may be similar for other LHDs. One person stated, "We have been instructed to keep away from this issue," indicating a very explicit and challenging barrier to overcome. Another noted that a Board of Health and a Board of County Commissioners govern their jurisdiction and "believe is the responsibility of other entities to address housing concerns."

B. Challenging health department or geographic limitations: Seven respondents noted specific challenges based on their health department or geographic area, especially those serving rural communities. One respondent noted that they were the only nurse on staff and split their time between two counties. Another noted that being a small, resource poor county affected staff and funding capacity to take on foreclosure. Another stated, "We are a very small, rural community in the Midwest and typically see a very delayed response to issues such as these. This will probably make our radar within the next 12 months."

C. Data issues: Forty-nine respondents brought up issues relating to data, including being unsure of the impact of foreclosure on the population they serve because they have no data. They described the need for local data that would help determine if foreclosure is a

problem and whom it is impacting. Those who responded that they had little data on the issue and were unsure of the impact of foreclosure were more likely to have never discussed the issue within their health department (20 instances of the codes co-occurring) as opposed to discussing foreclosure and making a conscious decision not to engage (only one co-occurrence) or planning to engage in some way (zero instances of the codes co-occurring).

Respondents took two approaches to describing the challenge of accessing local data. A small number used active language, indicating a sense of efficacy in moving forward in addressing foreclosure. One respondent stated that they "haven't found good stats to track impact—need access to bank stats," indicating that they had looked at some local data, were aware of data limitations, and could take steps to address those gaps. Another mentioned that their department was still in the "fact finding phase of housing issues related to health." Another respondent said that they "didn't know" for certain, but assumed that foreclosure "probably did" affect the health of the population they served; thus, they shared information about local programs to assist people with foreclosure problems on a large email list. These responses indicate that while more data would be helpful, they felt empowered to take steps in gathering more data and addressing the issue.

However, the majority of respondents described a lack of local data and often used passive voice, rather than describing how they might seek out data. They did not name any action steps they could take to further their role, indicating a lack of agency or capacity to collect and analyze data that could be helpful or move forward on addressing foreclosure without additional data. Examples include "I'm sure it has, but we have no measurable data and only anecdotal evidence" and "At this time there is not data available to the department to support discussion and engagement." While some respondents did not indicate who might provide this data, others stated other agencies should provide it or that they expected clients to raise the issue: "No resident facing foreclosure contacted the health department" and "Clients are not bringing this up at their visits."

D. Complex/new issue with few models: Related to the aforementioned "unclear role," some respondents discussed foreclosure being a new issue with few models for response or intervention. While only three responses focused specifically on the complexity or newness of addressing foreclosure, their comments reveal some key challenges LHDs face in this area and potentially for other social determinants. One respondent noted, "These issues take up time and are very complex to solve due to the nature of real estate law and securitization of loans." Another commented on how it would take many organizations outside the health department to address foreclosure. Finally, one respondent stated that this is a new issue and they were unsure if they should/how to work on it. Based on these comments, complexity arises in many areas, including: deciding if/how to work on an issue; developing the necessary and diverse relationships needed to tackle foreclosures; and finally, understanding and addressing a complicated issue. Related to the newness and complexity of foreclosure, fourteen respondents described needing models to help them in understanding both data describing the problem and how to respond. For example, on

respondent stated, “Would love to see examples of how health departments or other public health entities are addressing this.”

E. Not mandated and/or lack of statutory authority: Nine respondents mentioned either that work on foreclosure is not mandated, and therefore not funded, and/or that they do not believe they have statutory authority to address foreclosure. For example, one respondent stated, “Too many clear health related mandates and not enough resources to get those all done well. Foreclosure work for LHDs neither mandated nor funded.”

F. Lack of resources (people, funding, skills): Thirty-one respondents described the connection between resources, funding, and staff skills and the ability to address the foreclosure crisis. For example, one stated their LHD wanted to engage, but did not have enough “manpower.” Others described having so much other work, they could only try to connect people facing foreclosure to services. In addition to a general lack of staff, others specifically described not having staff with the needed skill sets or training to work on foreclosure. Some described not just a lack of resources, but deep cuts to resources: “Our health department went through a major reorganization in 2011 and was decreased to 3 departments...and 14 staff.” Another stated, “Our resources have been cut over 25% in the past 5 years. We have lost 30 FTE [full time employees]. Our people are stretched very thin to provide legislatively mandated services and contract work. We have no funding source to address this issue.” In addition to lack of funding, respondents described how the funding they did receive does not support working on foreclosure even though it affects health: “Honestly - funding. We are not funded to accurately address large scale problems like these.” A subset of respondents described the lack of resources in terms of competing priorities, such as, “Our resources are limited. Every time a government tax dollar is spent on a new program it takes money from an existing one.”

DISCUSSION

Diffusion of Innovations: As little previous research has been conducted on LHD involvement in the foreclosure crisis, an overarching finding from this survey is the wide variation in responses in both respondent beliefs and current work related to addressing foreclosure. This variation suggests that LHDs are moving through a diffusion of innovations process, with several LHDs already engaged, more planning to engage, and others not yet ready to engage.

While Table 1 shows that those who have not engaged and do not plan to engage are the largest group, it’s notable that 58 out of 166 respondents are already addressing foreclosure in some way or plan to engage. Based on the diffusion of innovations theory, it’s likely that some of those not currently engaged, who may be the late majority and laggards, will move towards engagement even if they do not anticipate doing so at this time. Similarly, Table 2 shows a substantial number of respondents believe that health departments should address the foreclosure crisis, or as comments in the Other category describe, would be supportive of this work with additional resources.

In addition to looking at the quantitative survey data from a diffusion of innovation lens, Table 8 is based on the open-ended survey responses and is an attempt to estimate LHD readiness to engage by diffusion of innovation categories. A limitation of Table 8 is that there is overlap between some categories (e.g. a response could be coded as "conducting assessments" and "addressing environmental issues"). However, the significant number of responses in the innovator and early adopter categories is noteworthy. While Table 3 shows that fewer LHDs are specifically working on policy change, it also demonstrates that there are a set of innovator LHDs who are creating their own roles and models for addressing foreclosure not just at the individual level, but also at the population level by changes structures and systems through policy. Taken together, these tables indicate that there are early adopter and early/late majority LHDs that may be responsive to resources, support, and models for moving forward in addressing foreclosure from a health equity framework.

What accounts for the variation in responses across the diffusion of innovation categories? In using a diffusion of innovation lens, questions arise as to why some LHDs have or are poised to adopt an approach to public health practice that includes addressing foreclosure, and some specifically through policy, while others have yet to engage. An analytic lens that is helpful for assessing the survey responses divides the responses into two categories: 1) responses that describe *pragmatic elements* that may either be challenges to this work or factors that facilitate engagement; and 2) responses that describe variation in *philosophical orientations* related to LHD involvement in foreclosure.

The pragmatic and philosophical clearly interact—if LHD staff do not have the philosophical orientation that addressing an issue like foreclosure is within their role, it's unlikely they will take steps to address gaps in the pragmatic area, such as prioritizing resources to hire staff with the skill sets needed for this type of analysis. And if pragmatic challenges are addressed, such as providing models or resources, philosophical views about the role of LHDs may shift as it becomes possible for LHD staff to visualize how they can play a role in addressing foreclosure or other social determinants of health. Accordingly, any planning on the part of LHDs to engage more deeply in foreclosure or housing-related work, or support from agencies that fund or provide resources to LHDs, should take these two areas into consideration. By using a philosophical/pragmatic lens, it's possible to further analyze the findings to identify barriers, recommendations, and areas for further research.

Pragmatic considerations: While influenced by philosophical factors, many of the challenges that respondents named are concrete, pragmatic issues, such as: a lack of resources; challenging health department, geographic, or political limitations; and foreclosure being a complex issue with few models for intervention. Innovators and early adopters may not have faced these challenges at the same magnitude or may have found ways to overcome them.

A lack of resources for LHDs is documented in other research, and LHD funding and staffing constraints are shown to affect LHDs' ability to protect and promote public health. According to NACCHO, since 2008, LHDs have collectively lost 48,300 jobs due to layoffs and attrition and many LHDs have faced multiple years of budget cuts.[63] Staffing and capacity of LHDs to engage

in the foreclosure crisis, or other social determinants, also vary across the country, as do geographic and political contexts. Categorical funding, or the interpretation of categorical funding constraints, may also limit LHDs ability to engage in work on social determinants of health. Engaging in policy change to address social determinants may generate concerns for elected officials, LHD leadership and staff, funding agencies, or partners.[44] Further research on how political, geographic, and other health department limitations impact work on social determinants can help with tailoring support, funding, technical assistance, and other resources to meet the needs of diverse LHDs. Continued advocacy for LHD funding is also necessary.

In terms of foreclosure being a new issue with few models for LHD intervention, the finding that 47 respondents are engaged in addressing foreclosure and 14 respondents described engaging specifically in local policy work related to foreclosure, means there is a growing body of examples that can be shared. There are also already models within the field of public health that can be applied to issues like foreclosure. For example, to supplement available local data, Alameda County Public Health Department (CA) and Causa Justa::Just Cause conducted a door-to-door survey related to foreclosure.[9] While LHD surveys on foreclosure are rare, LHDs and community organizations have conducted door-to-door surveys for other issues and lessons learned from their work can be applied to foreclosure and housing issues as one potential method for gathering data.[64–67]

Philosophic considerations: Other findings from the survey relate more closely to the philosophic orientations of respondents. As described, views about the role of LHDs in addressing foreclosure are affected by and affect pragmatic factors. There is also wide variability in beliefs about the role of LHDs, with responses ranging from seeing no role for LHDs in addressing foreclosure, to LHDs playing a reactive role, to a belief that LHDs have a responsibility to play a proactive, engaged role in addressing the causes and impacts of foreclosure. Learning more about where these beliefs stem from and how they affect the work of LHDs is an important aspect of understanding the diffusion of innovations process and determining how more LHDs can proactively engage in work related to foreclosure.

No role: While there are compelling pragmatic reasons for respondents seeing no role for their LHD in addressing foreclosure, such as a lack of resources, some responses do not focus on concrete barriers to the work, but are philosophical statements about the appropriate role of public health. Not seeing foreclosure or housing-related work as part of an LHDs' mission or responsibility is very different than wanting to engage but facing staffing or resource barriers. Staff perspectives can affect how they view pragmatic challenges and whether they take steps to overcome them—if they see no role for their LHD, then they are unlikely to take steps to address barriers.

For example, guidelines already exist that support LHD engagement in work related to health inequities. However, if LHD staff see no role for their health department in addressing foreclosure or housing, they may narrowly interpret these guidelines, may be unaware of them, or may not be using them to guide their work. Healthy People 2020 objectives and some state mandates, such California Health and Safety Code, provide guidelines or mandates that direct

LHDs to address health inequities.[68,69] The Core Functions and 10 Essential Services can be interpreted to include tracking and responding to emerging threats and root causes of poor health outcomes, or more narrowly interpreted as pertaining primarily to infectious disease outbreaks or other more traditional public health threats.[70] The LHD accreditation process includes explicit language around health equity, and tools LHDs are using to go through the process, such as Mobilizing for Action through Planning and Partnerships (MAPP), include a focus on health equity.[71,72] Finally, in addition to formal authority granted through statutes, LHDs have informal authority. Writing op-eds, letters to the editor, attending meetings, participating in coalitions, hosting events and discussion panels, creating data briefs, or developing relationships with community based organizations, government agencies, and elected officials may be ways that LHDs can raise issues such as foreclosure without relying on statutory authority. However, if staff see no role for the LHD in addressing foreclosure, it is unlikely they will interpret mandates and or use their authority in this way.

Reactive role: Respondents who primarily see the role of LHDs as reactive described activities such as attending to mandated environmental issues or addressing foreclosure if other agencies or clients bring it to their attention. Respondents who discussed environmental health focused on either the specific regulations that guide their work or described how foreclosed properties pose an environmental threat rather than describing foreclosure as an issue driving health inequities and having a normative grounding in the principles of social justice. Although some public health researchers and practitioners have expressed interest in addressing foreclosure as a social determinant of health and have implicitly or explicitly used a social justice framework to ground their approach,[5,8,9,12,46,73] little is written on whether or how environmental health staff are involved in these efforts.

Gaining a deeper understanding of the work and context of environmental health staff as it relates to foreclosure and health equity more broadly may yield new opportunities to bring a more specific health equity lens to this work. Learning more about the structure and culture of environmental health units or departments and providing environmental health staff with additional support in incorporating a social justice approach,[42] such as increasing transparency and community participation in efforts to address foreclosures, may be one way to increase LHD engagement in foreclosure and housing work. Connecting the various staff focused on environmental health, services, and policy with community partners engaged in housing and foreclosure work could provide a broad knowledge base about housing issues clients are facing and windows of opportunity for policy change.

The activities of environmental health units or programs may also provide staff with important skills and experiences that are helpful in proactive work to address foreclosure. While some environmental health activities are focused on services, such as restaurant inspections, they are often mandated by governing bodies outside the health department. Thus, environmental health staff may be familiar with some aspects of the policy-making process, which could be a useful skill to build on. In terms of underlying frameworks that guide their work, they may already be accustomed to thinking about social determinants of health, such as housing, and connecting these determinants to health outcomes, whereas in other LHD programs, many staff

are focused on treating health outcomes and may have fewer opportunities to directly engage in addressing social determinants.

In addition to the promising aspects of engaging more environmental health staff, it's important to note that some respondents described using funding to demolish or raze foreclosed properties to reduce environmental hazards. While their jurisdictions may not be facing a shortage of affordable housing, proposed foreclosure mitigation strategies include maintaining the current housing stock and keeping people in their homes rather than demolishing properties. In many areas, razing blighted properties harkens back to urban renewal policies that decimated and displaced communities of color.[12,74,75] Thus, one step in addressing LHDs' role in the foreclosure crisis is to understand whether LHDs are engaged in razing potentially viable housing and finding ways to end such practices.

Another area where responses indicate that survey participants see a reactive role for LHDs is related to data. A number of respondents indicated that they did not act on foreclosure due to a lack of data. This can be interpreted as a pragmatic issue since it indicates that respondents may have acted if they had better data. It is also possible that some respondents who have philosophical reasons for not acting on foreclosure identified lack of data as the barrier as a way of providing a more socially acceptable answer to the survey. While further research would be helpful in providing a more nuanced understanding, in this paper, I address this issue as one of pragmatics because it may, indeed, be a barrier for LHDs who might otherwise have been more active.

At the pragmatic level, while there is substantial research on the role various social determinants play in creating and maintaining health inequities, there is little research on LHD capacity to analyze these issues locally. Assessing and addressing LHD data analysis capacity and needs, and supplying funding, training, and other supports to bolster this work is a pragmatic step federal and state governmental organizations or foundations can take. However, at a philosophical level, many respondents described a hesitancy to proactively seek out data related to foreclosure or move forward on addressing foreclosure with minimal local data, such as responses related to not being provided with data or clients not raising the issue.

If staff do not see a role for LHDs in proactively collecting and analyzing data, this raises important questions for the field of public health. For many social issues that can have sizeable impacts on health and health inequities, like foreclosure, displacement, and wealth inequity, LHDs may face similar challenges in acquiring and analyzing data. In addition to providing pragmatic ways for LHDs to build their data capacity, it is critical to understand more about LHD staff philosophic perspectives about their role in collecting data.

As LHDs rely on client interactions as one means of data collection, understanding more about these interactions is also essential. LHDs provide a wide range of services and have diverse interactions with clients. Client interactions may not allow for residents to fully discuss the factors that affect their health, including issues like housing instability or financial stress. If clients do provide this information, it may not be collected and used to inform agency decisions

about funding and staffing priorities. For example, do LHD staff or contractors ask clients about social determinants, such as housing, foreclosure, or transportation? If not, would a client feel comfortable bringing up an issue outside of the LHD staff person's questions? What are the power dynamics occurring in these situations that may impact a client's comfort level and ability to raise an issue that isn't directly included in staff questions? If clients do bring up issues such as housing being a stressor or barrier to health, how is this information collected and analyzed? Do LHD staff feel empowered to raise issues outside the service they are providing with their supervisors, and do supervisors feel comfortable or have a way to raise these issues with departmental leadership or other staff who are engaged in policy work? If this information is collected, does it drive LHD decision-making and prioritization of resources? How does the funding of public health programs affect client and staff interactions? If there are staff within the LHD working on social determinants and policy change, are they connecting their work to direct services staff? Or are trainings and opportunities to engage in policy provided to direct services staff?

This also raises questions about what constitutes adequate public health data to justify proactive LHD involvement in addressing root causes of health inequities. LHDs may not regularly track data related to social determinants, like foreclosure, but when an issue arises with widespread implications for health outcomes, how much and why type of data are needed before LHDs react? Is anecdotal evidence and media reports on the severity of the problem enough? What is the responsibility of LHDs to proactively track and respond to emerging threats that are stemming from crises or systemic failures in social determinants of health? What pragmatic opportunities would help LHD develop their abilities to proactively collect and analyze data on social determinants? What would help more LHDs move towards a philosophical stance that includes a proactive role in collecting data?

Proactive role: Within responses that indicate that survey participants see a proactive role for their LHD in addressing foreclosures, some focused more on addressing individual needs while others discussed the need for interventions at the community level. Responses indicate that there is a stronger understanding of individual health outcomes related to foreclosure than community level impacts. Not surprisingly, many respondents described how their LHD is or could take a proactive role of addressing foreclosure through connecting individuals to case management and health services.

However, while these services are critical to people undergoing the physical and mental health costs of facing foreclosure or housing instability, based on such frameworks or theories such as Krieger's ecosocial theory or Hofrichter's framework on health inequities, as well as powell's theories on structural racialization, services alone will not address the underlying power dynamics. Nor will it affect how these power dynamics create differential access to social determinants, like housing, based on race, class, or other factors.[30,44,45] It does not address the causes of foreclosures nor the fact that subprime loans were targeted towards African-American, Latino, and some Asian/Pacific Islander communities. It does not seek to hold the financial sector accountable, stem the flood of foreclosures, or support work to address racialized lending patterns. Additionally, the finding that some LHDs are engaged in work to

address the foreclosure crisis itself in addition to its impacts shows that LHDs can expand their role beyond service provision.

As some LHDs are already providing targeted services, or providing services to clients who have an increased likelihood to be undergoing foreclosure, this may be a natural place to build LHD capacity to address foreclosure. With additional funding, staffing, training, models, and support, LHDs can create bridges between staff who provide services and staff and community partners focused on addressing the causes of foreclosure. For example, staff can connect clients undergoing foreclosure to housing and tenants' rights groups or opportunities to testify on policies that could prevent or address foreclosure.

Conducting assessments is another area where LHDs are moving past a reactive stance on data to taking a proactive role. While some respondents mentioned that foreclosure had come up in previous assessments or may come up in the assessments they plan to conduct, they offered little information on how they would use this information to influence or change their public health practice or policy, which could be a limitation of the brevity of a survey. Further research on how these assessments are conducted and used will be important in understanding the pathway from assessment to action (or inaction), as well as what actions are typically taken. As LHDs across the country are engaging in an accreditation process, which includes a Community Health Assessment (CHA) and Community Health Improvement Plan (CHIP), it's an opportunity to support LHDs in both using a CHA approach that captures social determinants, including foreclosure, and developing CHIPs to address these issues.[76]

It's also important to note that some respondents stated foreclosure had not come up in assessments. While there are guidelines on conducting CHAs and creating CHIPs as well as conducting other types of community health assessments, this process can vary in how focused it is on the root causes of health inequities. This occurs through several decisions that LHD staff make, including who is involved in the process (e.g. only public health practitioners verses including other sectors, such as housing, transportation, grassroots organizations, and residents), and what questions are asked during the assessment.[71] It's possible that foreclosure or social determinants do not arise in some assessments because important groups, people, and/or questions are missing from the process.

Responses related to partnerships indicate another area where LHDs may either willingly take a proactive role or where partners may invite or push LHDs to take a more engaged role, ranging from taking a lead on grants to participating under the leadership of others if asked. While the responses provide little information on who they are partnering with, LHDs that are engaging in work related to foreclosure or other social determinants have described the importance of partnerships, especially with base-building community-based organizations that directly engage residents and build leadership and grassroots power, and how these partnerships allow the LHD to accomplish more than if they worked alone.[40,77] While there are multiple efforts to build LHD capacity to understand and address the root causes of health inequities,[42,44,78,79] there may also be opportunities to provide potential partners, such as housing and tenants rights organizations, with more information on partnering or pressing their LHD to engage in this

issue. Funding that supports developing and sustaining long-term partnerships with diverse organizations as well as with governmental agencies working on housing may also help LHDs engage more deeply in housing and foreclosure issues. In areas of the country where there are no housing or tenants' rights groups, LHDs' strategies, and the support needed, may differ.

Finally, a substantial number of respondents see proactively addressing foreclosure, or more broadly, social determinants, as part of their role. This indicates an engaged set of public health practitioners who can supply examples of their work and express specific needs for tools, resources, trainings, and research on this topic. These may be the innovators and early adopters whose work will influence the early and late majority and lagging LHDs based on the diffusion of innovations theory, especially if governmental and philanthropic resources and support are dedicated to the diffusion process.

An important finding is that even among respondents that described a philosophical orientation towards proactively engaging in addressing foreclosure because of it's influence on health inequities, respondents were more likely to use language related to socio-economic status and/or class than race. Research shows that communicating about the causes of racial inequities is a challenging, but critical component of long-term plans to achieve racial equity.[80–84] Again, a limitation of the survey format is that responses were brief and it is not possible to assess if respondents are using a structural racialization lens to understand and communicate about foreclosure from these limited data. However, it is telling that even in brief responses, more people were comfortable bringing up markers or terms related to class (poverty, low-income) than race, even as the foreclosure crisis has been highly racialized in both its causes and outcomes.[11,13–15,73] This indicates a need for building LHD capacity with a specific lens on understanding and addressing racialized health outcomes and how they intersect with other forms of marginalization.

At a general level, many questions about pragmatic and philosophic factors remain. What else is different about those health departments that see addressing foreclosure as their part of their role? What are effective methods of supporting LHD staff in broadening their philosophic orientation to include a focus on social determinants? How did some move from seeing it as their role to actually engaging in work related to foreclosure? While LHDs named barriers to the work, are there other barriers that are not as readily apparent? What role does leadership play? What are the specific staff skills that LHDs need to do this type of work? If the national movement for LHDs accreditation is based on the premise that there should be some common and consistent services and functions that LHDs provide, what does it mean that there are such diverse views on whether addressing foreclosure, housing, and social determinants are core functions of public health? Seeking answers to these questions is an important next step in supporting LHDs in addressing foreclosure and other social determinants of health.

LIMITATIONS

While this survey contributes to a better understanding of LHDs' role in addressing foreclosure, it has numerous limitations. It is not generalizable to all LHDs and only includes a small number of LHDs relative to all health departments in the country. LHD staff who self-selected to take

the survey may differ in important ways from staff who did not take it and the LHDs they work at may also differ greatly. For some respondents, they noted their LHD was so large, they could only speak about their specific unit and were unsure whether other units were engaged in foreclosure in some way.

Survey responses were brief and the survey does not reflect the full knowledge or perceptions of respondents. At times it was difficult to determine if respondents were commenting specifically about the role of their health department, all health departments, or the field of public health in general. The limitations of survey research are well-documented, from the influence the wording and order of questions has on responses, to respondents giving socially desirable answers, to the inability to clarify or probe more deeply.[85] However, given the lack of research on LHD engagement in addressing social determinants of health, particularly foreclosures, this online survey is an appropriate method that adds to current research and helps build the foundation for future research that can address the limitations of this study. Other research approaches, such as in-depth interviews and case studies, will be helpful in validating these research findings.

CONCLUSION

LHDs function in rapidly changing contexts, ranging from the widespread budget cuts in the public sector, to the largest wealth inequities in the U.S. since the Depression, to growing social movements centered on inequity and justice, as evidenced by Occupy and Black Lives Matters.[63,86] As a growing number of LHDs work to tackle the root causes of health inequities, research on challenges, opportunities, and LHD staff views of their own role in addressing these issues is essential to helping public health practice move forward effectively. The foreclosure crisis presents great challenges to realizing health equity within the U.S.; it also presents an opportunity for a focused study of LHDs' role in addressing this crisis, which may also shed light on ways LHDs can engage in addressing the unequal distribution of other social determinants that contribute to health inequities.

While this online survey has many limitations, a critical finding is the variability in responses and that there is a pattern that aligns with the diffusion of innovations theory. There are innovators that can share their work, early adopters ready to take on this work, and early and late majority LHDs who may be able to soon follow if challenges are addressed and they are provided with support and guidance. Both pragmatic and philosophic factors influence where LHDs are in terms of the diffusion of innovations categories; thus, resources and supports should address barriers and create opportunities in both of these areas. Increasing the number of LHD staff, as well as staff in organizations that partner with or fund LHDs, who can visualize a proactive role for LHDs in addressing foreclosure, housing, and other social determinants is a critical part of building LHD capacity to address health inequities.

LHDs already have some venues for sharing their work and learning from each other, such as regional coalitions. However, the foreclosure crisis has and will continue to drastically shape access to housing and wealth, with clear implications for health. Because of our country's history and the roots of the subprime mortgage crisis, this also have severe implications for

racial and health inequities. LHDs cannot tackle the foreclosure crisis, or any social determinant of health alone. It will take the work of partners, residents, other government organizations, researchers, and more to help more LHDs adopt innovative work that addresses foreclosure, housing, and other social determinants. However, given the mission of LHDs to protect the public's health, and the growing and substantial body of research that shows the links between social determinants of health and health inequities, LHDs, and the organizations and researchers connected to them, must move forward in finding ways for LHDs to engage in work that addresses the root causes of health inequities.

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HUMAN PARTICIPANT PROTECTION

The University of California, Berkeley Institutional Review Board approved this study protocol. Online survey respondents provided informed consent to participate via the online survey.

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Table 1: Survey Responses to "Has your health department engaged in any work in response to the foreclosure crisis?"

Potential Diffusion of Innovations Category	Answer	Response	%
Innovators/ Early Adopters	Yes	47	28%
Early/Late Majorities	No, we have not engaged in any work related to foreclosure, but are planning on engaging in work related to foreclosure in the next year. Please describe what type of work you will be engaging in:	11	7%
Laggards	No, we have not engaged in any work related to the foreclosure crisis and do not plan on engaging in work related to foreclosure.	108	65%
	Total	166	100%

Table 2: Survey responses to "Do you think your health department should engage in work related to the foreclosure crisis?"

Answer	Response	%
Yes. If yes, why do you think your health department should engage in work related to foreclosure?	48	30%
No. If no, why do you think your department should not engage in work regarding foreclosure?	73	46%
Other. Please describe	39	24%
Total	160	100%

Table 3: Survey responses to "You indicated your health department has engaged in work in response to the foreclosure crisis. Out of the options below, please check all of the types of work your health department has engaged in."

Answer	Response	%
Met with other city or county agencies to discuss and plan responses to the foreclosure crisis	19	44%
Other: Please describe	18	42%
Communicated with community organizations that are addressing foreclosure	17	40%
Advocated for local policies related to foreclosure.	15	35%
Reached out to/communicated with local banks/finance groups regarding the foreclosure crisis	14	33%
Communicated with the media about the impact of foreclosure on health	10	23%
Provided data or research regarding the health impacts of foreclosure to partners, policymakers, advocates, or the media	7	16%
Released reports, factsheets, articles, blogs, or other information on foreclosure and health, either independently or in collaboration with other organizations	7	16%
Coordinated physical and/or mental health service provision with organizations providing foreclosure counseling or other services	7	16%
Provided targeted physical and/or mental health services to those facing foreclosure	5	12%
Provided formal testimony or communicated to policymakers regarding the health impact of the foreclosure crisis	5	12%
Analyzed local lending patterns in communities affected by the foreclosure crisis	2	5%
Total Responses (some responded to more than one activity so column does not add up to total)	43	

*This question only appeared in surveys for respondents who said their health department engaged in work related to the foreclosure crisis. Longer descriptions/examples of each activity were given in the survey.

Table 4: Survey Responses to "Approximately how many staff from your health department have engaged in any work in response to the foreclosure crisis, including staff who worked on it part-time?"

Answer	Response	%
1	8	20%
2	11	27%
3	4	10%
4	3	7%
5	4	10%
6	5	12%
7	1	2%
8	0	0%
9	1	2%
10	0	0%
More than 10	4	10%
Total	**41***	**100%**

*This question only appeared in surveys for respondents who said their health department engaged in work related to the foreclosure crisis.

Table 5: Survey Responses to "Has the foreclosure crisis affected the health of people your health department serves in any way?"

Answer	Response	%
Yes. If yes, please briefly describe.	78	47%
No	55	33%
Other, please describe.	32	19%
Total	165*	100%

*One person did not respond to this question.

Table 6: Survey responses to "Please select the option that most accurately describes why you think your health department has not engaged in any work in response to the foreclosure crisis."

Answer	Response	%
Our health department made a conscious decision not to work on foreclosure.	4	3%
We have never discussed whether we should engage in any work related to the foreclosure crisis. Please describe why you think this issue has not come up for discussion in your health department:	77	64%
Other. Please describe:	39	33%
Total	120	100%

*This question only appeared in surveys for respondents who said their health department had not engaged in work related to the foreclosure crisis.

Table 7: Survey responses to: "You indicated your health department made a conscious decision to not engage in any work in response to the foreclosure crisis. Out of the options below, please check all of the reasons why you think your health department has not engaged in this work."

Answer	Response	%
We do not have funding to hire staff to work on this issue	25	60%
We have prioritized other issues through strategic or community planning	19	45%
Current staff do not have time to work on this issue	17	40%
We do not have models for addressing foreclosure	17	40%
Current staff do not have the skills or experience needed to work on this issue	14	33%
Foreclosures are not affecting the populations we serve	12	29%
We do not see it as within the health department's role	10	24%
Because of budget cuts, we are not taking on any new work	10	24%
We don't have a plan for addressing emerging issues such as foreclosure	9	21%
Other. Please describe:	8	19%
It would be a politically contentious to work on this issue	6	14%
Our funding prohibits staff from working on policy	6	14%
Other agencies are working on it and do not need our help	6	14%
Lack of interest from leadership	6	14%
We do not think there is strong evidence showing that foreclosures affect health	3	7%
There is disagreement within our health department about whether we should work on this issue	2	5%
Total Responses (some responded to more than one activity so column does not add up to total)	42	

*This question only appeared in surveys for respondents who said their health department had not engaged in work related to the foreclosure crisis.

Table 8: Estimated Readiness to engage in addressing foreclosure based on perception of LHD role

General level of readiness to engage	Perceived Local Health Department Role	Number of Respondents (there is overlap between categories)
LAGGARDS: Not ready to engage in foreclosure	No role	8
EARLY and LATE MAJORITY: Needs models to engage	Unclear role	14
EARLY ADOPTERS: Sees role for LHDs in mitigating foreclosure through traditional public health roles	Connecting people to services, healthcare, and case management	35
	Addressing environmental issues	47
	Conducting assessments	9
INNOVATORS: Sees a role for LHDs addressing foreclosure as a social determinants	Addressing social determinants of health, including foreclosure	30

IV. Adopting an Innovative Public Health Practice to Address Foreclosure: A Case Study of Alameda County Public Health Department

ABSTRACT

***Objectives**:* Provide a case study of a local health department's (LHD) approach to addressing foreclosure and housing as a social determinant of health (SDH). This includes identifying factors that: 1) differentiate this innovative approach from traditional LHD activities; and, 2) contributed to this organization being an innovator among LHDs.

Methods: Analysis of 11 in-depth qualitative interviews (conducted February – June 2015) with Alameda County Public Health Department (ACPHD) staff and partners involved in work related to the foreclosure crisis.

Results: Interviewees described factors that contributed to ACPHD adopting an innovative approach of addressing foreclosure as a public health issue, including having: 1) a strong health equity framework that informs their work; 2) leadership support; and 3) partners that support ACPHD's involvement in local policy. Within the health equity framework, interviewees described both key principles that guided the work, such as shifting power and addressing structural racialization, as well as concrete ways the department instilled a health equity culture within the organization and translated this into action. This included building internal capacity, developing funding for health equity work, proactively collecting and analyzing data, and prioritizing community partnerships and knowledge.

Conclusions: Previous research has shown that LHDs may be following a diffusion of innovation pattern in adopting pioneering approaches to addressing foreclosure and housing as a contributor to health inequities. This case study of an innovator LHD addressing a SDH through policy change helps identify factors related to adopting a health equity practice that may be within LHDs' control. It also identifies influential factors outside of LHDs' control, with some being potentially amenable to change through the work of broader coalitions and others being more intransigent, but important to consider, as LHDs strive to address SDH through policy change.

INTRODUCTION

In 2006, foreclosure rates in the United States began to increase, especially in African-American, Latino, and some Asian/Pacific Islander communities that the financial sector targeted with subprime loans.[1–7] Studies have long confirmed the connection between housing and health and a growing body of research describes the effects of foreclosures on health.[8–15] As local health departments (LHDs) and the organizations that support their efforts have increasingly acknowledged that differential exposure to social determinants of health (SDH)[a] greatly contributes to health inequities,[b] the foreclosure crisis represents a test of this profession's ability to move from a rhetorical commitment to addressing SDH into actual public health interventions. In a national survey, many LHDs reported connecting individuals undergoing foreclosure to services and/or addressing environmental concerns related to foreclosed properties, as ways of addressing the health impacts of foreclosure.[18] In addition to these more traditional LHD approaches, some LHDs are expanding their work beyond individual service delivery and are becoming involved in local housing and foreclosure policy.[18]

Of LHDs that have taken steps to address foreclosure, the Alameda County Public Health Department (ACPHD) in California, has been at the forefront, developing strong partnerships with community-based organizations and government agencies, utilizing innovative approaches for data collection and analysis, developing and contributing to reports on foreclosure, housing, and displacement, and supporting ongoing local policy work to address the foreclosure crisis, such as mandating that banks register and maintain foreclosed properties. This paper presents a case study of ACPHD's work related to foreclosure based on interviews with current and former ACPHD staff and partners and provides a summary of findings, recommendations, and areas for future research. This includes identifying factors that: 1) differentiate this innovative approach from traditional LHD activities; and, 2) contributed to this organization being an innovator among LHDs. I include a discussion of how other LHDs may be able to address some of these same factors to increase their ability to adopt innovative approaches to addressing SDH. While this paper focuses mainly on issues related to why ACPHD's approach can be considered innovative and what organizational factors helped them adopt this approach, in another paper, I focus more specifically on the implications of ACPHD's involvement in the local policy process.[19]

BACKGROUND

Foreclosures and health

As foreclosures started to sweep across the country in 2006, they significantly affected access to stable, quality housing for both homeowners and tenants. Additionally, as home ownership is the main source of wealth for many people, the crisis drastically altered the distribution of wealth across the country. The health effects related to housing and wealth are widespread,

[a] "The **social determinants of health** are the conditions in which people are born, grow, live, work and age. These circumstances are shaped by the distribution of money, power and resources at global, national and local levels."[16]

[b] Whitehead defines **health inequities** as differences in health that are "unnecessary and avoidable but, in addition are also considered unfair and unjust."[17]

well-documented, and affect both quality and length of life through multiple pathways. In addition to these pathways, foreclosures can increase housing instability and financial burdens and disrupt social networks.[9,10,12–14,20] This can increase depression and stress; decrease the amount individuals are able to pay for food, medical care, and transportation; and lead to homelessness.[9,10,12–14,20] These factors are associated with statistically significant differences in hypertension, heart disease, psychiatric conditions, a lack of health insurance coverage, cost-related healthcare non-adherence, and cost-related prescription non-adherence.[13,20] At the community level, foreclosures: decrease property values and tax revenue, which in turn, affects local governmental funding for services that support health; degrade the social and physical infrastructure of neighborhoods; increase home vacancies and property abandonment, which is associated with a rise in violent crime; and affect community health for both those undergoing foreclosure and those who live nearby but are not undergoing foreclosure.[11,20]

Furthermore, as the foreclosure crisis has its origins in segregation and is a continuation of decades of policies that negatively affect communities of color, it stands to exacerbate already large and ingrained racial inequities in health that intersect with other SDH, creating cumulative and multiplicative effects.[1–5] For example, from January 2007 to December of 2009, nearly 8% of African American and Latinos had lost their homes nationwide compared to 4.5% of White, even when controlling for differences in income patterns between demographic groups.[5] Additionally, racial wealth inequities have widened during the crisis, with the median wealth of White households moving from 11 times that of African-American households to 20 times from 2005 to 2009.[21] As communities grapple with the aftermath of the crisis, this redistribution of wealth, land, and housing stands to influence health for generations.

Theoretical Frameworks

Several theoretical frameworks have guided this research. In the national survey in Chapter 3, responses followed a diffusion of innovation pattern, demonstrating that LHDs were at different stages of ability and willingness to develop innovative and non-traditional approaches to addressing foreclosure and housing.[18] Diffusion of innovation theory (DIT) outlines how individuals or organizations communicate about and adopt innovations, which are ideas, practices, or objects that are perceived as new.[22] It describes a social change process, and at the organizational level explains how both the organization and the innovation are altered, as organizations modify the innovation to meet their context and needs while also adapting to new innovations.[22] An innovation is more likely to be adopted if it has five characteristics: 1) relative advantage, or whether it is viewed as better than the previous approach; 2) compatibility, or whether it is consistent with existing values, experiences, and needs; 3) complexity, or how difficult it is to understand and use; 4) trialability, or whether it can be experimented with on a limited basis; and 5) observability, or the degree to which the results are visible.[22] Thus, one important aspect of this research is whether and how these five characteristics of the innovation ACPHD adopted—addressing the foreclosure crisis as one approach to addressing health inequities—influenced the health department's adoption of the innovation and what this might mean for other LHDs.

There are also five adopter classifications based on level of innovation: 1) innovator, 2) early adopters, 2) early majority, 4) late majority, and 5) laggards. In DIT, the term laggard is not derogatory as it may reflect the context of the organization, such as having limited resources and needing to know an innovation will be successful before investing scarce resources.[22] Innovative organizations tend to be larger in size; have greater system openness, or the degree to which organizational members are linked to those outside the organization; and less formalization, or emphasis on following rules and procedures.[22,23] Mytinger's study of LHDs in California suggests that innovativeness is most closely related to organizational size, which includes the number of staff, size of the budget, and size of the jurisdiction served, with larger organizations being more likely to be innovators.[22,24] Organizational size may be a proxy for other dimensions, such as slack or flexible resources that can be used for innovations outside of ongoing operations, and employees' technical expertise.[22]

Larger organizations are also more likely to adopt radical innovations, or innovations that are challenging and create more uncertainty.[22] These innovations often need to "be adopted through an innovation process that is relatively unstructured and almost completely unroutine."[22] Innovations are more likely to be successfully adopted when there are champions who work to overcome indifference or resistance to the new idea—they can be at multiple levels throughout the organizations and may be a coalition of individuals, but champions at the top level of leadership are important for costly, highly visible, and/or radical innovations.[22] Accordingly, another relevant aspect of this research is whether and how organizational factors may have contributed to ACPHD being an innovator.

Applying DIT to LHDs working to achieve health equity raises many questions: Do factors in previous DIT research hold true for health equity innovations? Are there other factors outside of those described in DIT that contribute to some LHDs being innovators? Are there factors that are unique to ACPHD that will be challenging for other LHDs to replicate? What factors may be within LHDs' control, meaning that by addressing these factors, LHDs may be able to increase their capacity to adopt innovative public health approaches targeted at SDH? Does addressing SDH pose special considerations for DIT?

To begin to answer these questions, it's important to describe how public health approaches that focus on addressing SDH differ from more traditional public health practices, and to consider what this means in terms of LHDs adopting innovative and effective approaches to addressing health inequities. Early public health efforts in the United States addressed the social conditions that contributed to poor health, such as the "dirt, dilapidation, overcrowding, and unsanitary conditions" of industrialization and urbanization.[25] Public health workers played a role in large scale societal reforms, such as passing housing and sanitation laws, which led to diminishing deaths from infectious diseases.[26] As chronic diseases became leading causes of death, public health research and practice shifted to focus on individual behaviors, widely thought to be the primary cause of chronic diseases.[26–28] However, health inequities along the

lines of place, race[c], and class are still prevalent.[25,26,30,30–32] A substantial body of research illustrates how social, political, economic, and environmental factors affect access to SDH, which in turn, affect multiple health outcomes and contribute to health inequities.[17,33–39] Thus, some have called upon LHDs to engage in public health interventions that address social factors that influence health inequities.[30,40–44] However, this work is challenging and LHDs are grappling with what a health equity practice entails and how to develop the infrastructure and capacity to take this approach.[43,45–50]

Accordingly, this research aims to support LHDs by providing a case study of how an LHD moved from rhetorically describing the causes of health inequities to taking action to address a SDH. Thus, I present a brief description of health equity frameworks to explain why ACPHD's practice can be considered innovative and whether there are special considerations for those who wish to increase the rate in which LHDs are moving towards a more explicitly focused health equity practice. While there are numerous frameworks related to health inequities, Krieger has written extensively on the topic and Hofrichter has directly tied his framework to LHDs. Both of their frameworks specify that power has a central role in creating health inequities by structuring interactions with SDH based on intersecting forms of oppression, such as race, gender, class, and immigration status, which then becomes embodied in differential disease and mortality rates, resulting in health inequities.[33,34] Thus, achieving health equity necessitates a conscious and deliberate analysis of power as well as explicit actions to shift power and address the current structures that maintain harmful power relations.

Additionally, to understand the foreclosure crisis and its impact on health inequities, is it critical to recognize the racialized causes and outcomes. During the foreclosure crisis, communities of color faced the greatest loss of wealth in modern U.S. history while the banking industry generated over one trillion dollars in profit through subprime loans.[1] While Krieger and Hofrichter both include structural racism in their frameworks, powell[d] discusses how and why what he describes as "structural racialization" arose in the U.S., how it has evolved, how it intersects with other forms of oppression, why we must be particularly cognizant about it, and how we might intervene on the causes of health inequities in a way that disrupts structural racialization, which powell defines as:

> ...the set of practices, cultural norms, and institutional arrangements that both reflect and help to create and maintain race-based outcomes in society. Because racialization is a set of historical and cultural processes, it does not have one particular meaning. Instead, it describes conditions and norms that are constantly evolving and interacting with the sociopolitical environment, varying from location to location as well as throughout different periods in history.[51]

[c] In looking at differences in life expectancy by race, this is not to imply genetic differences, but is linked to internalized, interpersonal, institutional, and structural racism and the impact of these levels of racism on health outcomes.[29]
[d] Professor john powell uses all lower case letters in his name.

Because historical and current policies and practices created conditions that made communities of a color a target for subprime loans, which then spread to a global financial crisis, a structural racialization lens is necessary to understand and address the foreclosure crisis.

In considering LHDs' role in efforts to prevent or mitigate the impacts of foreclosure, many of the structures Krieger, Hofrichter, and powell identify as creating and perpetuating inequities have their foundation in policy and legal systems. Thus, creating or changing SDH policy is one critical means of addressing health inequities and differs from more traditional LHD activities, such as monitoring disease outcomes, preparing for emergencies, addressing outbreaks, providing services to individuals with poor health outcomes, or engaging in policy in more established public health areas, such as tobacco prevention. The aforementioned frameworks also prioritize leadership from those most negatively impacted by health inequities, which in this case are communities of color and low-income communities, as an important aspect of the policy change process. As I show in Chapter 3, LHDs across the country may be in prime positions to both address foreclosure through policy and conduct this work in a way that prioritizes leadership from communities of color and low-income communities.[18] Thus, another central aspect of this research is understanding whether ACPHD's innovation included addressing power, focusing on structural racialization, targeting policy change, and prioritizing community leadership.

Based on these theoretical frameworks, this research sets out to answer three research questions: 1) How is ACPHD's approach an innovation as compared to traditional public health practice within LHDs? 2) What factors contributed to ACPHD being an innovator among LHDs? and 3) What are the implications for other LHDs?

METHODS

Focusing on ACPHD as a case study, I conducted semi-structured qualitative interviews with current and former LHD staff who worked on foreclosure and housing as well as external partners that are connected to ACPHD's work on these issues. As little research has been conducted on the role of LHDs in addressing foreclosure, the qualitative case study methodology is an appropriate research approach. Baxter and Jack summarize Yin's extensive work on case studies, stating:

> According to Yin (2003) a case study design should be considered when: (a) the focus of the study is to answer "how" and "why" questions; (b) you cannot manipulate the behaviour of those involved in the study; (c) you want to cover contextual conditions because you believe they are relevant to the phenomenon under study; or (d) the boundaries are not clear between the phenomenon and context.[52,53]

All of these hold true for understanding how and why ACPHD has been able to engage in local policy related to foreclosure and how lessons learned from their work can assist other LHDs in addressing foreclosure, housing, and other SDH. While it will be important to identify other case studies of LHDs working on foreclosure, housing, and other SDH to substantiate findings

from this research, none of the surveyed respondents described work within their health department that would provide a comparable case study to Alameda County (see Chapter 3).[18]

Interview Participants

I interviewed 11 subjects—seven current or former ACPHD staff and four staff from local or national partners that have worked with ACPHD on foreclosure and housing issues or could speak on the impact of ACPHD's work on LHDs and other public health agencies across the country. I identified interviewees through purposive and snowball recruitment, as they were either already known to me as having a key role in ACPHD's work related to foreclosure or suggested by interviewees. It was important to include partners from outside the organization as they can offer a perspective and critiques that differ from ACPHD staff. I provided information on informed consent both verbally and in writing to interviewees. While I do name ACPHD directly in this research, identifiable information of individuals who were interviewed has been removed from the data, including the names of partner organizations and of interviewees.[e]

Procedure

I developed a semi-structured interview guide based on my research questions, theoretical frameworks, themes identified through the national survey of LHDs on foreclosure, and research and resources related to LHDs engaging in work to achieve health equity.[18,40,42,43,54,55] Additionally, I have worked at ACPHD for over nine years, focusing on issues related to health equity, and used this firsthand knowledge to develop the interview guide. While I was not a lead on ACPHD's foreclosure or housing work, I did participate in certain aspects, which helped me develop my research questions and gave me an understanding of who was involved. I also sought feedback on the interview guide from my dissertation committee and three former LHD staff who had worked to address various SDH.

I conducted the interviews at places that were convenient to the interviewee during the period of February to June 2015 and each interview lasted 20 to 90 minutes; interviews with ACPHD staff lasting longer (60-90 minutes) than with partners because of additional questions specific to ACPHD staff. I conducted all interviews in person, except one that took place via telephone. Interview questions focused on: how ACPHD became involved in work related to foreclosure and how this work aligns with ACPHD's broader work on health equity; policy strategies and outcomes related to foreclosure; challenges and barriers; communication strategies and outcomes; the role of partnerships in this work; recommendations for other LHDs; and questions related to the theoretical framework, including a focus on structural racialization. For a sample interview guide, see Appendix A.

[e] As I did not ask interviewees to identify their gender during the interviews, and to protect the identify of respondents, I refer to all respondents with the pronoun "they."

Analysis

All interviewees consented to having the interviews audio recorded. After the interviews were transcribed, I coded the interviews in Dedoose, using an inductive/deductive coding approach. For example, I started the deductive coding process with *a priori* codes related to my theoretical frameworks such as *structural racialization*, but also added, modified, and collapsed codes throughout analysis to capture emergent themes in the collected data.[56] During this process, I worked closely with another researcher in the University of California, Berkeley's Doctor of Public Health Program to develop a codebook, starting with us reading and coding interviews together to develop initial codes, and then coding separately, comparing and adapting codes, and developing the final codes and codebook. Because of limited resources, funding, and time, the researcher was only able to review a sample of the interviews, but they did review my findings and themes and we reconciled differing perspectives related to coding and discussed what themes to highlight in the presentation of results in this paper.[57] I also presented main themes to my dissertation committee and sought feedback. Additionally, I provided interviewees with a draft of this paper to seek their feedback and provide alternative perspectives on themes I identified.

RESULTS

As previous research describes LHDs' need for models for engaging in policy work related to foreclosure, and multiple interviewees described not having a "roadmap," for this work, the key contribution of this study is a detailed description and analysis of ACPHD's approach.[18] In this section, I present findings from the research. I begin with a description of ACPHD's activities related to foreclosure and housing. Next, I present interviewees' reflections on the factors that enabled their approach, including: (A) their health equity framework; (B) leadership; and (C) partner capacity.

1. ACPHD's approach to addressing foreclosure and housing

While the department had been engaged in other initiatives focused on health equity, in 2006, ACPHD began developing Place Matters, a local SDH policy initiative, in partnership with Alameda County Supervisor Keith Carson's office. This was in response to an opportunity to participate in the National Collaborative for Health Equity's national Place Matters initiative.[42] One of ACPHD's first housing access efforts was its response to a request from neighborhood activists to comment on the health implications of a real estate developer's plans to displace a large number of elderly Chinese-American residents living in rent stabilized housing near the Oakland Chinatown area.[40] To identify additional ways Place Matters could support ongoing local policy work, staff conducted a needs assessment on several SDH, including housing, which coincided with ACPHD developing the report *Life and Death from Unnatural Causes: Health and Social Inequity in Alameda County*, published in 2008.[30] They contacted local organizations working on SDH for feedback on the needs assessment and report, leading to new partnerships and opportunities to engage in housing policy, such as providing testimony on affordable housing.[42] ACPHD also formed Place Matters workgroups that focused on specific SDH, with the Housing and Economic workgroups engaging in work related to the foreclosure crisis.

In 2008, Causa Justa::Just Cause (CJJC), a multi-racial grassroots organization that builds community leadership to achieve justice for low-income San Francisco and Oakland residents, received a request for assistance from a tenant facing water shut-offs in a foreclosed building because the bank that took over the property neglected to pay the water bill. Over time, CJJC came into contact with numerous tenants in similar situations. ACPHD staff noticed a request from CJJC for assistance on the Bridging the Bay listserv that another non-profit, Urban Habitat, managed.[58] ACPHD coordinated with CJJC and Supervisor Keith Carson's office on the issue and wrote a letter to the East Bay Municipal Utility District (EBMUD), urging them to prevent water shutoffs.[59] State legislation prevented EBMUD from placing liens against landlords; however, the Oakland city manager could place liens. CJJC continued to organize around renters facing water shutoffs and ACPHD, EBMUD, and the Oakland city manager met and developed a plan for placing liens and holding delinquent landlords and banks accountable, which included ACPHD declaring a health emergency related to the lack of water. During this time, CJJC also led efforts to enact a local resolution to prevent water shutoffs and pass the state-level Senate Bill 1035 in 2010, which allowed utility companies to place liens on properties for delinquent bills.[54]

CJJC then approached ACPHD about partnering on two reports on foreclosure and health that included a literature review, primary data collection in Oakland, and stories from residents.[12,13,54] While ACPHD had not yet collected data on foreclosure, staff were hearing about the health consequences of the crisis from clients and residents participating in community-capacity building initiatives. The California Endowment, a foundation, provided CJJC with funding to develop reports that described the link between foreclosure and health, and ACPHD had the capacity and resources to assign in-kind epidemiology and policy staff to the project. The organizations published the first report in 2009, with CJJC organizing the report release event. This took place in front of a home where the owner was facing foreclosure and featured resident and ACPHD speakers, garnering widespread coverage.[60] While ACPHD contributed to the policy recommendations in the report, CJJC had more housing policy expertise and therefore finalized the recommendations, providing the newly formed Place Matters Housing Workgroup with a roadmap for future work.

The Housing Workgroup continued to increase their understanding of housing issues while strengthening and building partnerships through engaging in local policy discussions and action, most of which were led by partners such as CJJC. This included Oakland passing a Vacant Property Registration Ordinance (VPRO) in 2012, which mandates that banks register and maintain foreclosed properties, netting the city over $1.6 million in its first 18 months to reduce blight.[54] One interviewee described how "CJJC, ACPHD, and a coalition of housing, labor, and community groups successfully advocated for an expansion of the VPRO to include occupied foreclosed properties and protection for tenants – a policy recommendation put forth in the foreclosure report." Because of the role of banks in the foreclosure crisis, the Place Matters Economics workgroup collaborated with CJJC, the city of Oakland, and other partners to update Oakland's Linked Banking Ordinance in 2012, to "include requirements that banks disclose detailed lending data, including any ties to predatory financial services located in Oakland," which then could be used by the city to make decisions about which company they used as their bank.[54,61]

Oakland was already facing a high demand for housing and out-of-town speculators bought large numbers of foreclosed properties, contributing to rising rents and selling prices.[62] Rising rental prices and older housing stock meant that many residents accepted poor housing conditions out of fear of landlord harassment. CJJC, ACPHD, and other partners advocated for resources for Oakland's code enforcement office in 2013 and worked to pass the Tenant Protection Ordinance in 2014, which prevents 16 types of landlord harassment. Additionally, CJJC led a campaign with ACPHD's support that resulted in improvements to Oakland's rent ordinance in 2014. Recent ACPHD housing work, also in partnership with CJJC, has focused on the connection between development, gentrification, and displacement, which is related to and affects the health of many of the same low-income communities of color that were targeted by subprime loans.[63]

2. Factors contributing to ACPHD's ability to address foreclosure as a public health issue

Interviewees described multiple factors that contributed to ACPHD's willingness and capacity to address foreclosure as a driver of health inequities. Interviewees consistently emphasized the importance of having a strong ***health equity framework***. Interviewees described key principles of the framework that influenced their approach and concrete steps the department took to institutionalize the framework and translate it into action. In describing how ACPHD came to develop and integrate this framework, interviewees emphasized the importance of ***leadership*** and how ***partners*** were instrumental in both shaping the health department's evolution as an organization and their ability to adopt an innovative practice.

Additionally, as noted above, the size of an organization and jurisdiction served may contribute to LHDs' ability to adopt innovative practices. In terms of size of jurisdiction, in 2014, there were approximately 1,600,000 people living in Alameda County, making it the 7th largest county in California, and the 21st largest county in the U.S.[64,65] With approximately 600 staff, ACPHD is among the 6% of large LHDs in the U.S. that have 200 or more staff.[66] ACPHD's total approved budget for fiscal year 2015-2016 is $105.32 million, which puts them in the top 11% of LHDs in terms of budget size (based on 2013 data).[66]

A. Health Equity Framework: Ten of the 11 interviewees described the critical importance of having a health equity framework that provided a foundation for the work. Interviewees described two particularly relevant aspects of the framework: a) key principles of the framework that differentiate it from more traditional public health approaches; b) concrete efforts on the part of ACPHD leadership and staff to instill a health equity culture within the organization and translate this into action.

1. ***Key principles of the health equity framework:*** Interviewees named several key principles that influenced ACPHD's innovative approach to addressing health inequities.

   a. Focus on SDH: To eliminate health inequities, interviewees stated that it is necessary to focus on the influence of SDH, such as housing, on communities, and that LHDs can take an active role in addressing SDH. For example, one interviewee noted:

I think it all comes from our history but also comes from our vision moving forward. I think we have a pretty strong, explicit vision that focuses on health equity. Being a county where there is health for all, no matter what your race, or where you live, or how much money you make. I mean, that's just our vision that guides a lot of our work, so something like this [foreclosure] then, when it comes to the table, that totally makes sense for us to go and take it on.

However, one interviewee described how keeping a focus on SDH requires continual work and will always be challenging, "There's always going to be more immediate and pressing needs in terms of population level health that folks will resource and see as a priority well above more long-term consequences of social problems."

B. Shifting power: To ensure more equitable access to SDH, interviewees described the need to explicitly focus on shifting power. They noted this differs from more traditional public health approaches where LHDs provide much-needed services to clients, but there is little or no work done to address power relations that shape access to SDH, such as financial and housing systems.

Although engaging in work to shift power can raise political tensions, interviewees stated that this was not necessarily seen as a challenge, but as an anticipated aspect of engaging in policy. Having the support of community partners was helpful if and when political tensions arose. As part of its strategy, ACPHD intentionally worked with community-based organizations (CBOs) that focused on building community power in low-income communities of color by engaging residents in the political process, building resident leadership, and shifting long-term power differentials while also addressing specific policies. Interviewees stated that it was important to partner with organizations that built power in communities that were most impacted so they could be part of both "figuring out how to make things better, but also as a way to create more power to prevent these kinds of things in the future." Another interviewee stressed that power imbalances should trigger LHD involvement and defined LHDs' role as rectifying these imbalances:

The basic principle is understanding that power underlies so much of the distribution of opportunity in society. And that when you see a group or constituency that essentially doesn't have a lot of power, and you see an institution or another group essentially leveraging their power to take advantage of that other less powerful group, that's when the health department has to weigh in because the consequence of not having power is that essentially, opportunity skews away from you. And when opportunity skews away from you, that impacts your health.

c. Addressing structural racialization: Interviewees also described understanding, acknowledging, and addressing structural racialization as a critical part of the health equity framework, although they often used other terms to describe this, such as structural or institutional racism. Interviewees discussed structural racialization as not just one of the

many causes of health inequities, but as a foundational cause that must be addressed to achieve health equity. Interviewees said it was especially relevant in housing and foreclosure, because of "the historical structural racist practices that went on around lending combined with the current disinvestment and persistent poverty" as well as ongoing racist practices, such as targeting subprime loans to communities of color.

ACPHD has used differences in life expectancy by place, race, and income as primary indicators in numerous reports, discussions, and other communication about health inequities.[30,42,48] This includes their analysis that a white child born in the affluent Oakland Hills will live, on average, 15 years longer than an African-American child born in the less affluent Oakland flats, a fact that has been cited by partners, the media, and elected officials.[30] Interviewees stated that ACPHD leadership was charging them to change this statistic; thus, it was a clear directive to work on structural racialization. Interviewees also described how ACPHD's leaderships' emphasis on structural racialization meant they did not have to hold back in discussing racism in a variety of settings, from external meetings, to publications, to writing official testimony.

This focus on structural racialization was apparent to external partners as well, who described ACPHD as being explicit about:

> *…the fact that many of the social and environmental factors that contribute to health or to lack of health are very racialized and have played out in ways that are really not about individual instances of discrimination or racism, but really about things like, where are the sources of pollution located in the city of Oakland and who lives there? It's black and brown people…And I think the public health department is not shy about calling that stuff out.*

Partners felt this was apparent in ACPHD publications and that the:

> *…department's leadership has had a strong acknowledgement of issues of race and structural racism and how structural racism and race impact questions of health and health equity….I think the department has gravitated to partnering with community organizations and engaging in policy fights that have a strong racial justice component as opposed to a race-neutral or non-raced analysis or approach to policy work.*

However, one interviewee noted that it was less clear whether this structural racialization lens was as strong or as visible in areas where the department was not working with a community partner, such as when the department is advocating for funding for ACPHD in the county-budgeting process or discussing how to use any discretionary funding within ACPHD.

2. ***Instilling a health equity culture and translating this to action:*** In addition to consensus on underlying principles of ACPHD's framework, there were also actions that leadership and

staff took to translate the framework into an innovative approach to addressing health inequities.

a. Building internal capacity to implement the framework: Interviewees explained how ACPHD intentionally integrated the framework into the department and built staff capacity to implement it. The framework provided a foundation for the department's internal capacity building initiatives and efforts, including: a Public Health 101 series for all staff that includes modules on social and health equity, addressing racism, and community capacity building; an intensive strategic planning process that included community participation; discussions on institutional racism and other forms of oppression; and presentations to staff and partners.[48] Interviewees described how these concrete investments in terms of staff time and leadership prioritization were critical for the foreclosure work. One interviewee stated, "without those things, we wouldn't have been able to work together as effectively as we did, because the department instilled these as our values." Another interviewee described how staff sometimes had differing opinions about details of the foreclosure-related activities, but there was a unified belief that the health department should be involved based on the framework, which greatly facilitated working through different viewpoints.

While it was challenging to evaluate the effectiveness of internal capacity building efforts in the midst of implementing them, interviewees stressed that in hindsight, the broader framework and efforts to engage staff around health equity were essential to success:

> *I think it's really important to think of this foreclosure example as standing within this broader framework, around focusing on health equity, health inequities, and the social determinants. If we hadn't done the prior work of really thinking about developing that framework and really better understanding what it means to address the upstream factors that are creating the conditions that lead to these horrible health outcomes that we see…That if we hadn't spent time doing that and if we just took foreclosure in isolation, it might have been a lot harder than I think what it was. Not to say it was easy…but I think what was critical for us was this larger framework. What was also critical for us, I think, in being able to do this kind of work, was also the time that we took to develop relationships with other folks working on this, on issues around this broader framework.*

ACPHD leadership also built epidemiology and policy capacity by creating staff positions related to health equity, such as a community epidemiologist and policy coordinator. Five interviewees described the importance of having a well-rounded epidemiology staff with diverse skills including: handling complex and large data sets; creating GIS maps that illustrate spatial health inequities and are compelling to those outside of public health;

having a background in community-based participatory research (CBPR)[f] or other participatory research methods; and being able to bridge epidemiology and participatory research; and knowing how to translate data to action.

In spite of having this critical staff infrastructure, interviewees outlined several capacity challenges. Not unexpectedly, the work is time-intensive, from the internally focused work, to communicating with elected officials and government partners, to conducting policy work. One interviewee noted that there was a sizeable learning curve in moving into housing policy and that, "It's very hard to talk about the health impacts of something that is a social/economic phenomenon without having a clear sense of what that thing is." It required a tremendous amount of research to understand the origins of the foreclosure crisis and gain fluency in potential solutions, especially those aligned with a health equity framework. They surmised that this will be similar for any new policy area that LHDs work in, which will likely be more challenging for innovator and early adopter LHDs who are at the forefront of the work.

However, while multiple interviewees noted that there are challenges in engaging in policy work related to SDH, these were not seen as insurmountable, but something to navigate. One interviewee stated:

> *These issues are just so big. Understanding foreclosures and how they came to be and what we can do to prevent such crises from happening again. Looking at the issue of gentrification and what are the health impacts. Every time we seek to take on these big issues that aren't looked at traditionally from the public health lens…we have to take a chance. And there are not road maps in how you go about investigating the health impacts in these contexts. There's not a road map and we're not experts at forming these kinds of non-traditional partnerships. We do it well right now, but there's no guidebook. There are no established rules on how you do this kind of research with working partnerships. So basically you have to take a leap of faith. And then you have to go where you haven't gone before. Outside your comfort zone.*

b. Funding: Interviewees described the importance of funding—ranging from having dedicated staff on the project to being able to print and widely distribute reports—as being a critical resource, especially in the initial phases of developing the work. ACPHD and partners have been able to attract foundation funding to translate the framework into action, starting with funding from the California Endowment that supported one of ACPHD's initial surveys that predated the foreclosure work by many years, which focused on social and environmental factors related to diabetes. They used this opportunity to develop an epidemiologist position dedicated to SDH and health equity.

[f] **CBPR** is defined as "a collaborative process that equitably involves all partners in the research process and recognizes the unique strengths that each brings. CBPR begins with a research topic of importance to the community with the aim of combining knowledge and action for social change to improve community health and eliminate health disparities."[67,68]

In addition to foundation funding, ACPHD was able to creatively use traditional funding streams to fund health equity work. During a restructuring of the organization, leadership moved epidemiologists and evaluators into one unit so they could work more closely together. This also created a revenue unit that could bill other programs for their services, which created discretionary funds that were used to support the policy work. ACPHD leadership also actively engaged in drafting Measure A, the Essential Health Care Services Initiative, that was adopted by Alameda County voters in March 2004, raising sales tax by one-half cent, which provides funding for public health and prevention efforts and some of the policy work.[69] Having slack, or discretionary, resources provided some flexibility in staffing that was essential to the foreclosure work, such as the work taking more staff time than initially anticipated.

c. Proactively collecting and analyzing data on SDH: The framework also helped define a proactive role for ACPHD in collecting foreclosure-related data. Before they had data on the issue, staff became aware of the foreclosure crisis through the media, interacting with clients facing foreclosure, or by living and working in highly impacted neighborhoods. While interviewees acknowledged that obtaining foreclosure data, or good proxy measures for foreclosure, took some time, it was seen as a challenge "the health department was willing to take on" because it was so aligned with the framework.

Interviewees described their role as both collecting data and taking action with the best available data they had: "That's part of the public health department's role in general, is to get out there in anticipation of a problem, not necessarily waiting for all the data and then just confirming whatever everybody already knows, because that's too late." This included reaching out to partners that could help provide supplemental data and actively working on policies that would generate additional local data. One interviewee stated:

> *They weren't moving forward on foreclosure despite a lack of data. They were advocating for more data...That registry [the Oakland Vacant Property Registry] was incredibly helpful to understand where foreclosures were, who held the notes, who to hold accountable for these poor health outcomes associated with vacant foreclosed properties. I mean, it was symbolic, but it was also directly effective to know who was responsible for maintaining these properties and where the vacant foreclosed properties were. Very, very powerful.*

While ACPHD and partners found ways to assess foreclosure as the local level, one interviewee described how there are still challenges related to data. This includes accessing and being able to analyze data at the neighborhood level, as well as having more complete neighborhood histories:

> *I think it's always important in this work to make it as relevant as possible to local communities. And some of our data tends to be at 30,000 feet, county-level data. Being able to bring it down to local neighborhoods and have resources that describe the history of the evolution of those neighborhoods so that people…are able to understand*

the context of how that neighborhood developed. Who lives there? Who had to live there? Who couldn't live there? It was the history and evolution of the neighborhood that we didn't have. We had one or two books that describe patterns of racially restricted zoning and racially restricted covenants, block-busting, the racial steering that happened by realtors [specifically in Oakland]. All that kind of stuff is really important to be able to tell part of an on-going story of people being dispossessed of property and rights under another name.

d. Valuing community knowledge and using participatory research methods: The emphasis on community knowledge and participation can be considered to be both a principle and an aspect of the framework that was directly translated into action. One interviewee described how valuing community knowledge became institutionalized in the department's work before the foreclosure work even started:

There was already this understanding, or a little bit of an understanding, that to just be limited by the data sources that we had available, that we were going to be missing a lot of the lived experience of folks because most of our data was mortality data, programmatic data, service related data, etc.…And so [staff were] hired to talk to folks about what their issues were and really identify community priorities. And so I think there was a little bit of an understanding…that it was important to be out in our communities, understanding what the lived experience of our communities was, and then thinking about what we, as a health department could do…And a key value and a key tenet of how we developed the work was really recognizing that communities really do need to identify their priorities…And I think that was just part of the new public health that Arnold Perkins, our director, was really trying to move forward.

One interviewee described how the department's prioritization of community leadership differs from more traditional public health approaches where LHD staff may view themselves as experts imparting knowledge to community groups: "I think that it takes a really open mind in working in partnership with grassroots community organizing groups…[health department staff] have a different worldview than people who are really on the ground who go out every day and organize community and galvanize people and politicians to think in a different way." The interviewee stated it was essential to be open and focus on organizing goals in addition to research goals, noting that they couldn't just "hop into a meeting" and impose their research agenda on the group.

Engaging in new partnerships brought both opportunities and challenges, although interviewees emphasized the benefits clearly outweighed any drawbacks. A continual challenge of this new work was that the role for ACPHD wasn't always clear and also evolved, meaning that staff had to continual work to define roles and not duplicate the work of other organizations. One interviewee noted that the most helpful resource in this area was ACPHD's partners, "We were partnering with community groups and figuring it out together and taking our cues from them about what would be helpful. Like what of our

power and expertise would be useful to bring to bear on this...When it comes to a lack of local models, our partners knew what they needed from us and we listened."

Interviewees also noted that CBOs they worked with had different processes, timelines, and decision-making approaches than an LHD and that it took time and a concerted effort to understand each other and be transparent at a more detailed level. This included being aware of imposing ACPHD's approach on partners, and one interviewee stated that, "There's always a need to be conscious, cognizant of one's place and one's values" in partnering with community groups.

This also meant a commitment from staff to work through any challenges that arose, which in turn, created a problem-solving atmosphere for staff, as one interviewee described: "The value system and political will was there in the leadership. I think if that's present, then you just figure out a way to navigate it." Several interviewees noted that this is not the case in all government agencies and felt that ACPHD had a long history of valuing methods and approaches that include direct engagement with residents. Partners also described ACPHD as being easier to partner with than some government agencies, as one interviewee described: "The people I have worked with are not bureaucratic. And so they are good thought partners around how do we solve this problem together. What resources do we have to bring to the table? And I think that's really important."

e. Using the framework to guide communication: Finally, the framework influenced communication with partners, at meetings, in testimonies, and in developing the foreclosure reports. The framework provided staff with a clear sense of what "my job was," helping them effectively communicate about ACPHD's involvement in the issue. Interviewees also stated the framework guided the language in the report, including the key message that the foreclosure crisis deeply impacts community health and is a structural, rather than an individual, issue.

In developing partnerships, the framework was an important communication tool. Interviewees described the work moving slowly at first, until ACPHD staff realized they needed to explicitly communicate their framework to partners, including being "upfront in talking about root causes in terms of racism and classism." Partners stated that they knew LHDs had some legal and regulatory basis to engage in foreclosure, but it was the presentation of the framework that made them realize that ACPHD was moving beyond traditional public health practice and attempting to adopt a new approach in addressing SDH policy, which made the department a more strategic partner that was worth investing time in to develop a deeper relationship. Interviewees defined this as a catalytic moment that helped move the work forward because it became apparent that the focus on root causes and structural racialization wasn't coming from just a few ACPHD staff, but was an organizational framework and commitment. One interviewee stated, "It was important to demonstrate to partners that we really were concerned about root causes and were applying a racial analysis. It was important that we had taken time to bring staff with us along in the process through internal trainings and creating space."

B. Leadership: The role of leadership throughout the department was important in developing and deeply integrating the health equity framework into the organization. Interviewees described Arnold Perkin's role as ACPHD's Health Director from 1994 to 2006 as especially influential and stated that he created a culture where the norm was to "to ask for forgiveness instead of permission" and emphasized that ACPHD staff were stewards of the communities and their mission was to put the "public" back into public health.[70] Thus, the emphasis on risk-taking and community participation had been a part of ACPHD's culture for many years. Interviewees described the long-lasting impact he had on the vision, culture, and practices of ACPHD:

> *I think our leadership in the department, clearly Arnold Perkins, set us on a path to trying to understand what lies beneath a lot of the superficial stuff. And Arnold was not public health trained. And that I think that is key. He just had an eye for injustice that the classically public health trained leader doesn't. They're trained as technicians, not as activists.*

1. ***Leadership roles:*** In addition to Perkins' leadership, interviewees consistently mentioned leadership at multiple levels within ACPHD as being fundamental to engaging in foreclosure policy. Interviewees described specific roles that top leadership played, including working within ACPHD to build an understanding of and support for the work. This included discussions with leadership to work through any concerns or hesitancy in aligning closely with a community-based organization that had a clearly progressive policy agenda. One interviewee noted that there were several internal discussions that were less about resistance and more about, "'How do we be effective? How do we be impactful? How do we be relevant in this space? What's the health angle?" Another key role was keeping other governmental agencies and elected officials informed of ACPHD's work, including presenting the overarching framework as well as specific policy work. In more visible settings, interviewees emphasized that while top leadership may not have been involved in all of the details, they were available when needed and were effective messengers whose presence lent credibility and weight at critical times in the policy work.

   While it was important for top leadership to move the department's resources and staff to this work, mid-level staff also demonstrated leadership and were "really critical because they played a big role in terms of actually being advocates with both their peers and with the leadership of the department." Throughout the policy work, mid-level staff made numerous influential decisions both within ACPHD that shaped the trajectory of the policy work and externally around what policies to support, data collection and analysis approaches, what messages to highlight in publications and testimonies, and how to address challenges.

2. ***Leadership approach:*** Interviewees also described significant aspects of leadership style that facilitated the work. One aspect was a commitment to and belief in the framework and its principles. One interviewee noted that, "people [working on health equity] were very

clear about the values that they brought to this work as well as recognizing that this was about pushing the envelope."

Several noted that while their supervisors provided a strong vision, they placed a high level of responsibility on mid-level staff, trusted their recommendations, and created a work environment that allowed for a great deal of autonomy, or as one interviewee stated, "I did have leadership and supervisors who were willing to just let me run with it. Who trusted me to run with it." Interviewees stated that engaging in policy work related to SDH was a new area and necessitated "taking risks." They noted that knowing that leadership "had their backs" allowed them to engage in challenging work with more confidence. While top leadership were not involved in some of the details, interviewees felt it was clear when they needed to confer with their supervisors, partially due to leadership style and partially due to protocols that staff developed for reacting to policy requests. Supervisors were also available, especially at critical junctures, prioritizing the foreclosure work and adjusting to changing policy timelines.

While risk-taking was a quality that interviewees defined as important for all staff, they raised how it is especially vital for formal leadership. This included being active leaders who sought out opportunities as opposed to those who are "pushed into the work." Additionally, interviewees described how it was important that leadership viewed controversial moments as learning experiences and realized that since there was no road map, the journey would not always be smooth. One interviewee noted that being comfortable with conflict is essential because part of what makes ACPHD approach innovative is an intentional focus on shifting power:

> *Given that this work is about confronting power, it's important to have leaders who are comfortable with that, with risk, with coming up against power, with conflict. And leaders who have their staffs' back and staff know that…It's important to have leadership that supports you taking this on. It's highly visible and you want people who want to own it and see it as something that they want. They have to want to take a risk. If your leadership is totally risk averse, it would be really hard to do this kind of work. Or at least get it off the ground.*

C. Partner Capacity: While valuing and prioritizing community partnerships was an important aspect of ACPHD's implementation of the health equity framework, there is another aspect of partnerships that is related to, but falls outside of actions ACPHD has control over. Interviewees described how partner capacity shaped ACPHD's ability to adopt this innovation and how differing contexts may shape other LHDs' approach for adopting similar practices.

1. ***Working in areas with dense partner networks:*** Interviewees noted that the Bay area has a "rich trove of resources" including public health organizations, universities, colleges, and CBOs. As described, as ACPHD entered new territory, they often took cues from partners, ranging from which policies to focus on, to what their role should be, to learning the intricacies of housing policy. One interviewee stated:

At that point we were really clear that we needed to go further upstream in our practice. And so what that meant was really addressing issues around housing, transportation, education, economic development…And that it was clear that there were folks in our community that were really working on those issues and it was really a matter of us building relationships with them.

Interviewees emphasized that for LHDs where there is a "dense eco-system of organizations," it is essential to "start from the very beginning by engaging those forces in the discussion and actually not going too far down the line and trying figure it out on their own." Interviewees noted that because the housing sector is incredible complex, it takes time to learn all of the "players" and their angles, and that, "you wouldn't ever just want to talk to one organization and think you had figured it out." In addition to providing content knowledge in various sectors, interviewees described how building strong partnerships helped ACPHD deepen and evolve their framework. For example, one interviewee described how CJJC had a strongly developed structural racialization approach that took into account the "deep racism in housing that influenced the foreclosure crisis," while also helped ACPHD advance their own framework and analysis approach.

2. ***Working in areas with fewer CBOs and partners:*** Interviewees acknowledged that LHDs in other areas may face different challenges in engaging in housing policy and this may shape how they adopt innovative policy work. One interviewee mentioned talking with LHD staff in an area where there were no tenant and housing rights groups. Where this infrastructure does not exist, interviewees postulated that the LHD approach would differ:

...there probably is more of a need for there to be the analysis and commitment within the department at all levels. So I think it doesn't work if it is only at the top of the pyramid in the structure. I don't think it works by just having a few great people who are frontline staff who are trying to move something. I think it requires leadership, commitment, and understanding of what it is that's trying to happen at all levels...

Another interviewee noted that it was also critical to talk to as many people as possible to understand the issue, including the lived experiences behind the data since the issues communities are facing might not be apparent on the surface:

What have you personally experienced with foreclosure? It's often hard to see what's going on just on the surface and you do need to dig in beyond what a community might look like or what the housing issues might look like on the surface. Like, hey, this looks like a bunch of like nicely kept up single-family homes, but maybe there are two or three families living in them. And what does that mean? And what does it say about this community and that community's health?

While interviewees believed that LHDs can play important roles in advancing foreclosure and housing policy, they emphasized LHDs must take on roles that fit their organization and strengths. This includes:

> *… figuring out how whether or not there is a lot of existing community infrastructure and how to support that being built up over time. Because I think that there's examples of where departments try to become the organizers, and I don't think that really works. I think that fundamentally, the kind of organizing and building of a community infrastructure has to be done by folks in the community. And the department I think can do a lot. It can fund it, it can share resources, make sure there's infrastructure that gets developed and things like that…So maybe a partnership with the local foundation, figuring out what the strongest most vibrant community-serving infrastructure is. Is it through the schools? Is it through the neighborhood groups? Is it through a church?... I think the thing that feels clear to me is that the answer isn't the health department hiring a bunch of organizers and thinking that then you can organize the community. I think that's the kind of outcome that is least realistic to me long-term. It might work over a couple of years, over a period, over the life of a project or two, but I just don't feel like it has long-term sustainability. It's really about building that in the community itself so that it has autonomy and vision and life.*

DISCUSSION

The purpose of this research is to present a case study of one LHD that has adopted an innovative public health approach to addressing foreclosure as a SDH and to identify factors that may have contributed to their ability to adopt this innovation. While the context that each LHD works in differs from Alameda County, there may be factors that health departments and the organizations that support them can address that increase the rate in which LHDs adopt similar innovations, thereby decreasing health inequities across the nation. Additionally, there are factors outside the individual control of LHDs that coalitions and national organizations may be able to influence to increase the adoption of innovative health equity approaches. Finally, there are factors that are outside the control of LHDs or other organizations; however, these factors should be considered in understanding if and how LHDs may be able to focus on root causes of health inequities.

Is ACPHD's approach an innovation and are they an innovator?

Based on the theoretical frameworks guiding this research, interviewee responses, and outcomes related to ACPHD and partners' activities, ACPHD can be viewed as an innovator LHD. Innovator organizations are typically among the first organizations to adopt a new approach and are considered "risk-takers." ACPHD has been at the forefront of LHDs addressing foreclosure and their work has evolved and expanded to include numerous partners and multiple policy issues.

ACPHD's approach can be considered an innovation because it incorporates aspects of a health equity framework that are atypical among LHDs, including: targeting social factors rather than individual behaviors; addressing a SDH that affects multiple health issues rather than focusing

on a specific health outcome; shifting power and altering systems that structure differential access to SDH; building partnerships with base-building CBOs that directly engage low-income residents of color and build resident power; focusing on policy change that will have population-level impacts; and attempting to integrate a health equity framework with an explicit focus on structural racialization into the work.[42–44,47] Based on DIT, ACPHD's work could also be categorized as a "radical innovation" in that there was a high degree of uncertainty in many aspects of implementation and it was highly visible to elected officials, news media, and other LHDs, and had the potential to be controversial. While there is undoubtedly room for improvement in ACPHD's work, this approach differs from the types of programs and services LHDs are typically funded to offer and represents one way LHDs can evolve their work to offer both much needed services while also working to tackle SDH that affect health.[43,46–48,55]

What factors contributed to ACPHD being an innovator?

As noted in DIT, innovator organizations often have specific characteristics that are associated with the adoption of innovations, including: being a large organization, having slack resources, serving a large jurisdiction, having champions within the organization, having system openness, and having less formalization. Of these factors, organizational size, budget, and the size of the jurisdiction served are factors that can be viewed as unique to ACPHD and challenging for LHDs to control. Additionally, ACPHD was able to attract resources and influence budgeting processes to develop slack resources they could focus on foreclosure work.

As described in DIT, interviewees also noted that they relied heavily on developing networks outside of traditional public health practice, such as reaching out to housing advocates and CBOs. ACPHD staff are also part of various regional and national coalitions, such as the Bay Area Regional Health Inequities Initiative (BARHII) and the National Association of County and City Health Officials' (NACCHO) Social Justice and Health Equity Advisory Committee. Interviewees, especially mid-level staff, described spending a significant amount of time at partner or coalition meetings, often with the purpose of learning more about the policy issues and developing relationships. Thus, ACPHD had an organizational culture of system openness that facilitated staff linking to those outside of the organization and helped the health department adopt their innovative approach.

In terms of having less formalization, or emphasis on following rules and procedures, interviewees gave numerous examples of a "risk-taking" culture that permeated all levels of staff. They also described high levels of autonomy for staff engaged in the foreclosure work, especially mid-level staff who held substantial responsibility and decision-making power. Interviewees described having the flexibility to adjust to uncertain timelines and staffing needs, being able to "run with it," and adjusting to policy opportunities. This aligns with previous DIT findings that radical innovations require a process that "is relatively unstructured and almost completely unroutine."[22]

As in other DIT research, champions were an important factor in ACPHD adopting their innovative approach, with multiple staff levels demonstrating leadership and champion qualities. As in DIT, interviewees stated it was essential to have top leadership involved as

champions, given this can be considered a radical innovation. In terms of political context, interviewees noted that the Bay area is generally progressive and that several elected officials were supportive of ACPHD's work. While there may be resistance to all innovations, political conflict is quite different than the challenge of implementing a new computer technology within an organization. In the ACPHD case, interviewees discussed specific steps they took to build political support, such as keeping elected officials updated and building a strong base by partnering with CBOs. They also started with less controversial issues, like the water shutoffs, that aligned with elected officials' interests.

How did characteristics of the innovation affect ACPHD's ability to adopt it?
To answer this question, it is helpful to return to DIT and assess how the innovation—addressing the foreclosure crisis as one approach of moving towards health equity—aligns with the five characteristics that influence how likely it is an innovation will be adopted: relative advantage, compatibility, complexity, trialability, and observability.

ACPHD had the least amount of control over the actual SDH—the foreclosure crisis—and its impacts on health. This affected the complexity of the intervention, as interviewees noted that there was a sizeable learning curve in understanding the housing and financial sectors, the causes of the crisis, the potential solutions and which were most aligned with an equity framework and long-term political strategy, and how ACPHD could be helpful to new partners rather than duplicating efforts. As one interviewee noted, this will likely be the same in any policy area an LHD tries to tackle.

In terms of compatibility, ACPHD invested a substantial amount of time and resources into shifting organizational norms, values, capacity, and resources to actualize the framework. Because the health equity framework was in place and already understood, when the foreclosure crisis arose, the innovation was clearly compatible with ACPHD's organizational values, experiences, and identified community needs. All interviewees described a firm belief that using an approach grounded in the health equity framework has a relative advantage in eliminating health inequities over solely providing individual services.

While the foreclosure crisis and other SDH affect the complexity of the innovation, there are aspects of complexity that ACPHD had control over, as well as trialability and observability. In this case study, ACPHD entered into foreclosure policy by experimenting on a limited basis through addressing the development in Chinatown and the water shutoffs. Interviewees stated that the health impacts of these issues were clear and straightforward, making it easier to communicate to new partners and elected officials about why the health department was involved. Both had a clear policy goal—preventing displacement and stopping the water shutoffs—and both were spearheaded by community partners who were able to help ACPHD define their role. Additionally, for each new aspect of foreclosure and housing that ACPHD has addressed, they proactively developed a data and research base.

While housing and foreclosure are complex, by focusing on these more manageable issues as first steps, ACPHD decreased the complexity of the innovation, making it easier to adopt. It also

allowed for trialability—gradually building and adjusting the innovation through small steps. Staff and partners could observe clear impacts from ACPHD engaging in the issue, which built momentum, support, partnerships, and staff confidence and knowledge for more complex work, such as the foreclosure and displacement reports, as well as addressing habitability issues. The knowledge and support of community partners also helped ACPHD reduce the complexity of the innovation, which may be unique to Alameda County's dense network of community partners. ACPHD was able to learn from partners and especially in their first forays into housing policy, ACPHD was not the main organization creating policy windows of opportunity.

What are the implications for other LHDs?

In understanding how these findings may relate to other LHDs, it is also helpful to differentiate between what aspects are potentially within LHDs' control verses what would be challenging for an LHD to address on their own. LHDs clearly cannot change the size of their jurisdiction, and while they may advocate and apply for funding, some of which may be used for additional staff, LHDs have continued to face budget and staffing challenges. NACCHO estimates that between 2008 and 2013, LHDs collectively lost 48,300 jobs due to layoffs and attrition and many LHDs have faced multiple years of budget cuts.[66]

Although budget size may be harder for LHDs to control, it may possible to develop slack resources. However, the context LHDs work in will greatly impact their capacity to influence budget allocations and apply for additional funding, as fundraising efforts require additional staff time and skill. What may be more in the immediate realm of control for LHDs is how they prioritize the slack resources they do have. ACPHD was able use slack resources and start its work with a small number of staff, as well as leadership support and oversight. In ACPHD's case, both epidemiology skills, especially bridging participatory and epidemiological research and GIS mapping, were viewed as important, as well as having staff with a policy focus. As staff were able to demonstrate successes, as well as unmet needs related to SDH policy, they were able to gradually build the initiative and focus additional slack resources on expanding the number of staff.

The partnership context may vary greatly for LHDs, with some being in areas with numerous potential partners. In these instances, LHDs can assess whether they support their both mid-level staff and leadership in developing the necessary networks to adopt an innovative approach. Other areas may not have a dense network of CBOs focused on housing or other SDH. In areas with few local partners, staff may be able to consult with neighboring cities and counties, or engage in state and national opportunities to develop broader networks. LHDs may want to enter into local policy through another SDH where there are more potential partners or assess how they might be able to support CBOs in building their capacity, as the Boston Public Health Commission has done.[71]

The other organizational factors outlined in DIT may be areas where LHDs have substantially more control, including formalization and developing champions. LHDs can also assess their level of formalization and determine whether they need to create a culture with less

formalization, at least for work focused on SDH. In ACPHD's case, interviewees also noted that there was clarity about when to involve top leadership. Thus, another step LHDs could take is outlining critical areas that must be formalized, such as how the health officer approves testimonies or written letters in support of policies, and then developing an approach for staff to have some autonomy outside of these rules. Developing champions and leadership is an area where LHDs may have substantial control. Budget and political constraints may mean some LHDs take small steps or focus on internal capacity before taking any highly visible step, but this could help develop champions for when the department becomes engaged in external work related to SDH.

Based on this case study, the diffusion of health equity innovations among LHDs may differ in certain respects from other DIT research. As described, innovations focused on health equity may face political resistance and repercussions that differ from less controversial innovations. Health officers are often appointed and can face political pressure. Directing resources to health equity innovations may be opposed for political reasons. While these challenges to diffusion are not insurmountable, the study of DIT of health equity work in LHDs must consider power and politics. It's possible that other LHDs could take similar steps to ACPHD—taking on issues that some policymakers support, partnering with CBOs, and choosing issues with a clear health connection. Even in more politically conservative areas, LHDs may be one government agency that can gradually build momentum for progressive change, including policies that seek to address racial and health inequities.

Another area where health equity innovations may differ from other innovations is related to the values that drive health equity work. While other organizations may adopt innovations that are compatible with organizational values such as efficiency or productivity, interviewees described the values of the health equity framework as being centered on social justice, fairness, opportunity, equity, and addressing complex and deeply embedded societal fissures, including structural racialization. Extensive literature shows the values related to a health equity framework to be complex, controversial, contested, and deeply fraught with a history that this country struggles to address.[51,72–74] In ACPHD's case, the department had engaged in years of discussions about power, oppression, and structural racism, as well as what social and health equity actually mean before they adopted an innovative policy approach. Other LHDs seeking to adopt a health equity focus will have to grapple with these values in some way. These are challenging conversations in any context, and developing the resources and capacity to have them within governmental organizations like LHDs adds a deep and complex layer to the DIT process. However, in the ACPHD case, while there has been ongoing commitment to the underlying values of the framework, the development of a practice focused on SDH policy has been iterative. The organization has been able to expand its external policy work while continually building internal capacity and developing a more critical and sophisticated health equity framework.

Implications for practice & future research

This research is one step in articulating how and why LHDs can address the structural conditions that contribute to health inequities and how the broader public health field can support this

work. While additional examples of LHDs addressing foreclosure, housing, and other SDH are clearly needed as comparisons, this research provides a summary of ACPHD's trajectory and offers an analysis of the factors that have contributed to ACPHD's capacity and willingness to take on foreclosure as a public health issue, and how this may relate to other LHDs adopting similar approaches. Further exploration of LHDs addressing the inequitable distribution of SDH as a root cause of health inequities can help LHDs adopt innovative and effective approaches to using their unique role in communities across the country to achieve health equity.

This research also illustrates there are two areas—the innovation and the organization—that can influence whether and how LHDs adopt innovations related to addressing SDH like foreclosure. Within these areas, there are factors that are more and less within LHDs' control—further research addressing these factors will be helpful in informing public health practice tools, resources, and funding. For factors that LHDs cannot address, such as the size and the political context of the jurisdiction they serve, research can further identify LHD needs, barriers, and what has or might be successful in increasing the rate of adoption of a health equity practice in these areas. Further research is also needed on factors that are challenging for LHDs to control on their own, such as budgets, staff size, density and focus of community partners, and slack resources. If budget and size are indeed related to innovativeness, then regional, state, and national efforts to maintain and expand LHD funding may have an impact on the ability of LHDs to adopt innovative health equity practices. Foundations and agencies that fund public health initiatives may also want to assess how their funding builds community infrastructure outside of health departments, such as CBOs that work on housing and tenant rights, and consider increasing funding to build the capacity of potential LHD partners.

Finally, there are multiple areas that are potentially within LHDs' control. This case study identified several—supporting champions and leadership, transforming organizational culture, and developing innovations that can begin as small steps and evolve. Further research is necessary to validate the findings of this case study, identify other factors that may not have appeared in this case study, and determine effective processes for LHDs and organizations that support them to build capacity in these areas. In public health practice, there are already a growing number of initiatives that aim to support LHDs—it will be imperative to monitor these and support the most effective approaches.

In the area of building internal capacity and transforming organizational culture, an increasing number of local and state health departments have developed models[44,46,48,75] and there are a growing number of tools and resources to assist LHDs in this process.[45,50,71,76,77] Another promising area of public health practice is the focus on developing health equity champions. For example, Human Impact Partners (HIP) designed a "Public Health and Equity Cohort," which is a 15-month curriculum designed to help 12 emerging LHD leaders advance equity within their health department.[49] In addition to an overall focus on leadership, the curriculum touches on many of the areas identified in the ACPHD case study, including addressing internal capacity, building community partnerships and infrastructure, understanding and addressing power, and using a structural racialization lens in health equity work.

Finally, the growing movement around governing for racial equity that is broader, but inclusive of LHDs, is a promising area of research and practice.[78,79] For example, initiatives like the Government Alliance on Race and Equity are working with government agencies to address social factors that affect racial and health equity in jurisdictions with diverse political orientations.[78] As a growing number of regional and national coalitions focus on governing for racial equity and programs such as the one from HIP build LHD capacity in this area, there are numerous research opportunities that can in turn, support the effective expansion and diffusion of this innovative approach.

Limitations

While there is a growing body of research on how foreclosure affects public health, there is a lack of research on how those in the public health field, and more specifically LHDs, are engaged in addressing foreclosure. While this case study contributes one example, there are many limitations. First, the study design does not provide a comparison LHD, as I only focused on ACPHD's experience. With previous research (Chapter 3), I conducted a national survey of LHDs with the intention of identifying two LHDs that had engaged in policy work related to foreclosure. Specifically, I wanted to identify LHDs where several staff had been involved in policy activities over a period of time so I could compare their work, which would allow me to identify important areas of similarity and dissimilarity. While there were numerous LHDs engaged in addressing foreclosure, it was mostly through targeted service provision or through mandated environmental health activities related to abandoned properties. Of those that were engaged in policy, most respondents had few staff involved for a short period of time, which differed greatly from ACPHD's experience and were therefore not sufficient as comparisons. In one LHD, a variety of city and county offices had strong working relationships related to foreclosure, so there was no need to engage in policy work. The lack of one or more comparison LHDs means that it is not possible to identify which factors are essential or most influential across one or more health departments. A larger sample might have also alerted me to additional findings that were not apparent in the ACPHD case study; thus, there may be key factors that facilitate LHDs engaging in foreclosure or similar policy work that I have not identified.

The qualitative interview approach also presents several limitations.[80] In all interview-based research, respondents may provide socially desirable answers. Additionally, in developing my sample, I have likely missed staff or partners who could have provided corroborating or countering perspectives. Additionally, my position as both a researcher from UC Berkeley and a staff person at ACPHD created several opportunities for this research but also created limitations. It was potentially easier for me to schedule interviews and develop rapport with interviewees. However, even though I informed interviewees that I would remove personally identifying information, I am still connected to ACPHD and interviewees may have be hesitant to offer critiques of ACPHD or the agency's work.

In the analysis phase, again, my connection to ACPHD provided background that helped me identify key themes, but also greatly influenced my interpretation of the data. While no researcher can approach qualitative data analysis without bringing their cultural, educational,

and professional background with them, being so closely connected with ACPHD means I came into the research with assumptions based on my experiences. While I utilized my dissertation committee and another DrPH researcher to discuss the codebook, findings, and alternative hypotheses, the analysis phase could have been greatly strengthened had this been a funded research project with a research team. This would have allowed for more robust discussions of the codebook and an assessment of intercoder reliability. Future research that includes more than one LHD and a diverse research team will address many of these issues.

CONCLUSION

In 1973, Rittel and Webber wrote about the "wicked problems" of social policy, referring to problems that are resistant to resolution.[81] They described how many social issues that local jurisdictions were compelled to address in the past were more straightforward, such as building the first streets for a town. However, as our society has become increasingly complex, we are faced by wicked problems that aren't solvable by any one sector and brush up against the limits of our technologic advances. The foreclosure crisis—with its roots in decades of social policies such as segregation and its connection to multiple corporate and public sectors as well as levels of government—is clearly a wicked problem. Additionally, the crisis has already caused great harm across the nation, including contributing to pressing health issues, such as homelessness and suicide.

Despite the challenges of addressing this wicked problem, the public health ramifications unmistakably show a need for both public health researchers and practitioners to engage in addressing foreclosure, housing, and other SDH that greatly affect health. While LHDs differ greatly across the nation, the fact that there are approximately 2,800 of them connected to communities throughout the country means that they may be able to play a unique and important role in addressing foreclosure and housing as public health issues. As one interviewee stated, "Keeping people in stable, quality housing—it should be part of their [LHD's] mission."

This case study is one step in understanding how LHDs can become more involved in directly addressing the root causes of health inequities, such as foreclosure and housing. DIT has shown that innovations can be spread through a passive diffusion process; however, they can also be more intentionally disseminated by assessing innovations and innovators, increasing inter-organizational communication about innovations, and changing the norm of what is expected by and from LHDs.[23] While this research study is only one step in this process, it supports a growing focus on the role of LHDs in engaging in the innovative work needed to address health inequities and move towards a society where everyone has the opportunity to be healthy.

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APPENDIX A: SAMPLE INTERVIEW GUIDE

Date: *Time started:* *Time ended:*

INTRODUCTION

Thank you for agreeing to meet with me. I know I mentioned this in the email, but I just wanted to introduce myself again. My name is Katherine Schaff and I'm a student in the Doctor of Public Health program at the University of California, Berkeley. I'm interested in how local health departments have engaged in work related to the foreclosure crisis, especially how they communicated about this topic. Earlier this year, I conducted a national survey of local health departments about their work on foreclosure. Now I'm conducting a case study of Alameda County Public Health Department's (ACPHD) work on foreclosure and I would like to hear your perspective about this this work. I'm especially interested in: ACPHD's communication approach in working on this issue and if and how ACPHD has been able to consider and address structural racialization as an aspect of the foreclosure crisis as well as barriers to doing this. So that we are both working from a common definition in this interview, this is how john powell defines structuralized racism [provided as a hardcopy to interviewee]:

> By racialization, I refer to the set of practices, cultural norms, and institutional arrangements that both reflect and help to create and maintain race-based outcomes in society. Because racialization is a set of historical and cultural processes, it does not have one particular meaning. Instead, it describes conditions and norms that are constantly evolving and interacting with the sociopolitical environment, varying from location to location as well as throughout different periods in history.
>
> -From powell j. *Racing to Justice: Transforming Our Conceptions of Self and Other to Build an Inclusive Society*. Indiana University Press; 2012.

Do you have any questions about the interview process before we move on to informed consent?

INFORMED CONSENT

The Committee on the Protection of Human Subjects at UC Berkeley requires Informed Consent for this interview. As I mentioned, this is an interview about ACPHD's work related to the foreclosure crisis. The questions pertain to your experiences and perceptions about working on this issue as an ACPHD staff person or partner. It is okay to stop the interview at any time if you have any questions and you should feel free not to answer for any reason. Your participation is strictly confidential. In any publications, I will only mention ACPHD and partner organizations and will not use any information that could be used to identify individuals. Once I complete all of the interviews, I will summarize my findings and themes and give all interviewees an opportunity to provide feedback on the findings. Do you have any questions at this point? Would you like to continue? I'd also like to record today's interview so I make sure I capture everything accurately. May I record the interview?

INTERVIEWEE BACKGROUND

1) Can you tell me more about your **position** at ACPHD [or the position you had at ACPHD] [or the position you have at your current organization?]
   - Probe: How long have you/did you work at ACPHD?
   - Probe: How much of your work has been focused on foreclosure or housing issues?
   - Probe for partners: Can you tell me more about how your organization has worked with ACPHD?

ACPHD ENGAGEMENT IN FORECLOSURE

2) Can you tell me more about how ACPHD [or your organization] **got involved** in work related to the foreclosure crisis? [Skip for those not working at ACPHD during the start of the foreclosure work]
   - Probe: In your opinion, what prompted ACPHD's decision to engage?
   - Probe: Would you characterize the beginning of ACPHD's work on foreclosure as proactive or reactive (e.g. proactively getting involved or reacting to a community or partner request)?
3) How was/is the work on foreclosure **funded**?
4) Can you tell me more about the **staff** involved?
   - Probe: **How many people** have worked on foreclosure related issues throughout the years?
   - Probe: What are their **roles**?
   - Probe: What are their educational and career **backgrounds**? [or: Can you tell me more about how your educational and career background ties to this work on foreclosure?]
5) In your view, how does ACPHD's work on foreclosure fit in with the **organization's overall approach** to achieving health equity?
   - Probe: Did ACPHD approach this work taking **structural racialization** into consideration? If so, how?

POLICY STRATEGY

6) Can you describe the work you have done related to foreclosure?
   - Probe: What **policies** has ACPHD focused on?
   - Probe: Who has the **authority** to make decisions about these policies? (e.g. city council, city planning department, etc.)?
   - Probe: Can you tell me more about **how ACPHD made the decision to work** on these specific policies? Who made the decision to work on them? How did they make that decision? How was it decided that staff would spend time on these policies?
   - Probe: Was there any **resistance** to working on foreclosure?
   - Probe: What are some of the **typical activities** ACPHD staff are engaged in related to foreclosure?

CHALLENGES & BARRIERS

7) What **challenges and barriers** has ACPHD faced in doing this work?

8) What are some of the ways ACPHD has **overcome** these challenges?
9) I conducted a survey of local health departments and there were several challenges that came up in addressing the foreclosure crisis. These challenges include things like [provided as a hardcopy to interviewee]: 1. working on a complex/new issue; 2. a lack of local data on the issue; 3. politics; 4. a lack of models for moving forward; 5. that this is not mandated work and is not viewed as part of a local health department's statutory authority; and 6. a lack of resources, including staffing, funding, and skills. **Were these were challenges for ACPHD as well, and if so, how ACPHD overcame them?**
    - Probe: Can you tell me more about 1 and 2?
    - Probe: Why do you think ACPHD has been able to engage in addressing the foreclosure crisis through policy change when many of the LHDs responding have not been able to do this? Are there key factors that you think were essential to having this work move forward?
    - Probe: Did you have models for moving forward on this work? Or specific aspects of this work, like certain policies or communication approaches? If not, how did you move forward without models or examples?

COMMUNICATION STRATEGY

Communication Strategy

10) Who have you **communicated to** about foreclosure (e.g. policymakers, media, clients, community partners, etc.)?
11) What **types of communication** have you engaged in related to foreclosure? For example, one-on-one conversations with policymakers, providing testimony or official letters, speaking to the media, disseminating reports?
12) Can you tell me about the **content** of what was communicated?
    - Prompt: Were there certain messages ACPHD was trying to get across?
    - Prompt: Were there other key parts of what you were communicating?
13) Who was **involved in this communication** from ACPHD staff? What were their roles?
14) How were **decisions made** about communication? Was there a point person?
    - Probe: Were there disagreements about how to communicate about foreclosure? If so, how were they resolved? Were there specific communication challenges?
15) Did you/ACPHD develop a **communication plan** related to any aspects of the foreclosure work? Why or why not?
    - Probe: If yes, what did it include?
16) What **resources** did you have to develop for your communication strategies and materials? This could include talking points, reports, internal documents, media advocacy, etc.
17) What **resources** would have been helpful to have in developing communication related to foreclosure?
18) Did you describe foreclosure as a **health issue**? Why or why not?

19) **African-American, Latino, and some Asian-American communities** were especially hard hit by foreclosures. Did you describe foreclosure as being related to **race or racism**? Why or why not?
    - Probe: Where there benefits or challenges to the way you chose to relate or not relate foreclosure to racism?
    - Probe: Can you walk me through an example? [Probe if it was data, language, maps, explicit, implicit, etc.]
    - Probe: Did you target any African-American or Latino news media outlets or did they reach out to you?
20) Can you tell me more about ACPHD's internal communication related to working on foreclosure? For example, what was/is being communicated internally to staff and how was/is it communicated?
    - Are there any key lessons learned about internal communication—both things that have worked well and things that could have gone better?

Partners

21) Were any **other organizations** involved in this work, including governmental organizations and community-based organizations? Can you describe their roles?
22) Can you describe any **strengths or value** they brought to the process?
23) Can you describe any **challenges** that occurred by them being involved in the process?
24) Did any of the partners have **communication experience or capacity** that they brought to this work?
25) Are there partners or others that you think are important for me to interview? Do you have a contact I can reach out to? Would you be willing to introduce me to them via an email?

Media Contact

26) Did ACPHD **contact the news media** to discuss anything related to foreclosure (e.g. a report release, a policy, etc.)?
27) Have reporters **contacted ACPHD** to discuss anything related to foreclosure?
28) From your perspective, did the reporter already have a **health angle** for the story?
29) Have you utilized **social media** around this issue?
    - Prompt: How so?
    - Prompt: Have you used it to influence policymakers?

Outcomes

30) I'd like you to reflect on the outcomes of this work on foreclosure. What have ACPHD & partners accomplished?
    - Prompt: Are there interim or process outcomes? Or changes related to institutional practices? Have other organizations or structures changed?
31) How might you approach addressing foreclosures now that you have had this experience? What would you tell a local health department just starting this work?
    - Probe: In your general work related to foreclosure, what has **gone well**?

- Probe: Specifically thinking of communication about foreclosure, what has **gone well**?
- Probe: In your general work related to foreclosure, what could have **gone better**?
- Probe: Specifically thinking of communication about foreclosure, what could have **gone better**?

WRAP UP AND PLANS FOR THE FUTURE

32) Thank you so much for your time. Before we wrap up, is there **anything else** you want to share?
    - Probe: Is there anything else I should have asked you?
    - Probe: Is there **anyone else** I should speak to?
33) Once I analyze all of the interviews, I will summarize the main findings/themes and provide them to the interviewees to get feedback on whether my findings seem accurate to everyone. Would you like me to include you in this part of the research phase?
34) Do you have any **last questions** for me?

Interview Summary Sheet

Date: Time:

Interviewer:
Interviewee Code Number:

Checklist:
☐ Obtained verbal consent
☐ Notes
☐ Tape of interview

Description of Setting:

Description of Interviewee (e.g. distracted, engaged, nervous, etc.) :

Emotional Tone of the Interview:

Methodological/Other Difficulties:

Positive Aspects of the Interview:

Negative Aspects of the Interview:

Other Insights/Ideas/Thoughts:

Additional Comments:

V. Policy Entrepreneurs, Agenda-Setting, and Communication: An Exploration of How a Local Health Department Engaged in Addressing the Foreclosure Crisis

ABSTRACT

***Objectives**:* Provide a case study of a local health department (LHD) engaged in addressing the foreclosure crisis, including their role as a policy entrepreneur in agenda-setting, as well as their communication approach.

Methods: Analysis of 11 in-depth qualitative interviews (conducted February – June 2015) with Alameda County Public Health Department (ACPHD) staff and partners involved in work related to the foreclosure crisis.

Results: A main finding is that while ACPHD proactively engaged in developing a policy entrepreneur role as they expanded their public health practice to include an explicit focus on policies related to social determinants of health (SDH), their approach included sharing this role with a community-based organization. Interviewees described perceived outcomes of this shared policy entrepreneur role, including having a greater collective impact on agenda-setting than either organization would have had working on their own.

Conclusions: This case study illustrates that it is possible for a LHD to address SDH policy while taking into consideration many of the factors outlined in health equity frameworks, such as structural racialization. Additionally, as in this case, LHDs can begin to engage in policy before they have fully developed into a policy entrepreneur through partnerships with community-based organizations. Areas for future research include how LHDs are engaging in SDH policy in diverse political and geographic contexts as well as investigating how LHDs can be supported in advancing their policy entrepreneur role.

INTRODUCTION

Across the country, local health departments (LHDs) are charged with maintaining and protecting the public's health, which in traditional public health practice, often includes activities such as providing services to individuals and conducting disease surveillance.[1] While these are important components of public health practice, they do not address the underlying structures and systems that contribute to health inequities.[a] [2,4–10] Research demonstrates that social, political, economic, and environmental factors affect access to social determinants of health (SDH),[b] and differential access is often predicated on race, class, place, and other forms of marginalization.[2–4,10–14] Researchers and practitioners have identified policy change and community organizing as approaches that can create more equitable access to SDH, which can in turn, decrease health inequities.[3,13,15–17]

In 2006, a wave of foreclosures began to sweep the country, disproportionately affecting African-American, Latino, and some Asian/Pacific Islander communities that were targeted with subprime loans.[18–24] Because of the link between housing and health, some of the 2,800 LHDs across the country targeted services to clients undergoing foreclosure and addressed the environmental hazards of foreclosed homes.[25] A smaller number attempted to limit the health risks stemming from foreclosure by engaging in local policy change, such as advocating for vacant property registration ordinances, which can force banks to maintain vacant properties and clean up blighted properties.[25]

Becoming involved in SDH policy is a relatively new approach to addressing health inequities for LHDs, and while theoretical frameworks and research on other governmental actors may provide insight into how LHDs can function in the policymaking process, little of this research focuses on LHDs engaging in SDH policy. This research provides a case study of how the Alameda County Public Health Department (ACPHD), located in California, developed an innovative approach to addressing foreclosure. It focuses on how the organization engaged in the policymaking process, including its role as policy entrepreneurs, which involved influencing the agenda-setting process[c] and advancing a communication[d] approach that reframed foreclosure as a public health issue, all of which was done in close partnership with resident-driven community groups.[e] In light of a growing number of LHDs seeking to address SDH through policy, this case provides an opportunity to assess the role of one LHD in the

[a] Whitehead defines **health inequities** as differences in health that are "unnecessary and avoidable but, in addition, are also considered unfair and unjust."[2]

[b] "The **social determinants of health** are the conditions in which people are born, grow, live, work and age. These circumstances are shaped by the distribution of money, power and resources at the global, national and local levels."[9]

[c] Kingdon defines an **agenda** as "the list of subjects or problems to which governmental officials, and people outside the government closely associated with those officials, are paying some serious attention at any given time."[26] He further specifies that the **governmental agenda** as "the list of subjects that are getting attention" and the **decision agenda** as the list of subjects within the governmental agenda that are up for active decision.[26]

[d] **Communication** derives from the Latin *communis*, or *to share.* A modern definition is "conveying information through the exchange of thoughts, messages, or information as by speech, visuals, writing, or behavior."[27] This broad definition captures a range of activities LHDs may engage in, such as internal communication with staff, face-to-face meetings with policymakers, and issuing press releases to generate news coverage.

[e] For a more comprehensive description of ACPHD's history and involvement in the foreclosure crisis, see Schaff K. (2015). *Local Health Department Engagement in Addressing the Foreclosure Crisis: A Case Study of Alameda County Public Health Department.* Manuscript in preparation.

policymaking process and challenges it faced as it shifted from a public health practice focused on individual services to a more expansive approach that also includes policy change aimed at social factors that have not traditionally been within the scope of LHDs.

BACKGROUND

Foreclosures and health

While there is a substantial amount of research on the connections between housing and health,[28–30] several recent studies illustrate how foreclosures harm public health, both at the individual and community level by: disrupting social networks; increasing housing and financial instability; decreasing the amount individuals can pay for other necessities, such as food, medical care, prescriptions, and transportation; increasing homelessness; increasing property abandonment and blight, which is associated with a rise in violent crime; and decreasing property tax revenue, which affects local government funding for services that support health.[31–38] Associated health outcomes include an increase in depression, stress, hypertension, heart disease, psychiatric conditions, cost-related healthcare and prescription non-adherence, and suicide.[32–37,39] These negative health impacts are not just limited to homeowners—in 2008, during the height of the crisis, rentals accounted for more than 20% of the properties facing foreclosure and because they often house multiple families, renters made up 40% of the families losing their home in the same year.[17] Renters often have lower incomes than homeowners, making them particularly susceptible to negative health outcomes related to foreclosure.[31,32]

Additionally, the foreclosure crisis stands to increase already ingrained health inequities. It built on our country's history of redlining, predatory lending, and exclusionary zoning laws, disproportionately affecting African-American, Latino, and some Asian/Pacific Islander communities, and increasing banking industry profits by extracting wealth from communities of color through the sale of subprime mortgages.[19,21,23,31,32,41–46] As home ownership is the main source of wealth for many people, there has been a widening of racial wealth inequities during the crisis, with the median wealth of White households moving from 11 times that of African-American households to 20 times from 2005 to 2009.[47] As more unequal societies experience worse health outcomes on average for the whole population than more egalitarian societies, the changing distribution of wealth may impact not just those facing foreclosure, but broader society.[48] The redistribution of housing, land, and wealth threatens future generations as well.[49,50] Finally, many of the same neighborhoods that were targeted with predatory lending also face barriers to quality education, transportation, and jobs as well as a fair criminal justice system, creating interlocking, systemic barriers to health.

Local policy change to address foreclosure

While this study focuses on local policy change, addressing the foreclosure crisis necessitates interventions at the local, regional, state, and federal level. Additionally, policy is not the only means for achieving social change—social movements that incorporate civil disobedience, art and culture, protest, community organizing, and other methods have all contributed to shifting power, changing dominant narratives, building more inclusive government, and creating

progressive social change, as well as pushing for policy change. However, local policy change can be an important aspect of preventing foreclosures, ensuring fair and sustainable mortgages, stabilizing and restoring neighborhoods, rebuilding economic security, and fostering fair housing.[51] Some examples include local policies related to mandatory mediation for lenders,[51] vacant property registration ordianances,[51] responsible banking ordiances,[52] and using eminent domain to keep families in their homes,[20] all of which also have the potential to impact health. While LHDs typically have not been involved in local foreclosure policy,[25] they could become involved in these or other forms of policy change by: providing data on housing, foreclosures, and health; testifying or informing policymakers about potential health impacts of proposed policies; working on administrative policy within governmental agencies; addressing organizational policies of private institutions, such as banks; influencing and monitoring policy implementation; connecting clients to community-based organizations that focus on tenant and homeowners' rights; supporting communities in building autonomous organizing infrastructure in areas with few housing and tenant organizations; and bringing together diverse stakeholders, including community partners, to address foreclosure and housing.

Theoretical frameworks

Several theoretical frameworks from multiple fields have informed this research. From the public health field, Krieger and Hofrichter explain how health inequities are created, perpetuated, and maintained, noting that power plays a central role in structuring access to SDH based on intersecting forms of oppression, such as race, gender, class, and immigration status.[10,11] Through his structural racialization theory, powell[f] provides a more detailed framework for assessing the racialized causes and outcomes of the subprime lending crisis and how this may impact LHDs' policy and communication strategy.[42,43,53,54] He defines structural racialization as:

> ...the set of practices, cultural norms, and institutional arrangements that both reflect and help to create and maintain race-based outcomes in society. Because racialization is a set of historical and cultural processes, it does not have one particular meaning. Instead, it describes conditions and norms that are constantly evolving and interacting with the sociopolitical environment, varying from location to location as well as throughout different periods in history.[53]

The origins of the subprime lending crisis began decades before the rise in foreclosures and long before the deregulation of the financial markets in the 1980s that created an opening for subprime loans. Policies that codified segregation into law and steered home ownership opportunities to whites while isolating communities of color from mainstream banking institutions set the stage for crisis and meant communities of color were disproportionately impacted.[20,55] This was in conjunction with racial discrimination across multiple interconnected systems, such as education and transportation, along with the development of narratives that justified these discriminatory practices.[19,20,42,56–58] As the foreclosure crisis has its roots in this history of discriminatory policy and supporting narratives, current solutions are not limited to,

[f] john powell uses all lowercase letters in his name.

but must include a focus on policy and communication and are likely to be more successful if they use a structural racialization lens.

From the field of communication, diffusion of innovations theory, which focuses on how organizations communicate about and adopt innovations, is helpful in understanding the wide variability in LHDs' actions related to foreclosure.[25] Previous research suggests that LHDs' approach to addressing foreclosure follows a diffusion of innovations pattern, with innovator, early adopter, early majority, late majority, and laggard LHDs being at different stages in capacity and willingness to adopt new approaches to addressing foreclosure and housing.[25,59,60] In a previous paper, I concentrated on what led ACPHD to engage in foreclosure policy, focusing on how both organizational factors and aspects of the innovation it adopted enhanced its ability to be at the forefront of LHDs in addressing foreclosure.[61] This paper moves forward based on the premise that ACPHD is an innovator and concentrates on its role in the policymaking process.

Focusing on policy change as one way to advance health equity makes several interrelated frameworks from political science and communication relevant, including: 1) the role of policy entrepreneurs in agenda-setting; and 2) how policy entrepreneurs use communication in agenda-setting. A subset of political science literature and research focuses on the role of bureaucratic and administrative agencies in policymaking.[62–64] For example, in examining federal tobacco prevention, Fritschler and Rudder found that several entrepreneurial bureaucracies acted in the interests of the public's health, successfully confronting the power of the tobacco industry and Congress.[64] These government agencies were experts at collecting and interpreting data and were able to translate this information into power, utilizing strategic communication to garner media attention and steer policy to protect the public's health.[64]

Mintrom defines policy entrepreneurs as "people who seek to initiate dynamic policy change"[65] and Kingdon notes that they can be in elected or appointed positions, in interest groups, or research organizations, but their defining characteristic "is their willingness to invest their resources—time, energy, reputation, and sometimes money—in the hope a future return."[26] Mintrom describes policy entrepreneurs as adept at "identifying problems, networking in policy circles, shaping the terms of policy debates, and building coalitions" and being "willing to take risks to promote innovative approaches to problem solving."[65] Mintrom and Norman state that while contextual factors may limit or facilitate the success of policy entrepreneurs, they "distinguish themselves through their desire to significantly change current ways of doing things in their area of interest."[66] They describe how policy change is often incremental, yet "instances occur when new challenges appear so significant that established systems of managing them are judged inadequate. A key part of policy entrepreneurship involves seizing such moments to promote major change. Such action requires creativity, energy, and political skill."[66] Thus, the foreclosure crisis highlighted grave inadequacies in current policy and provided policy entrepreneurs a window of opportunity to push for change.

In these studies, the authors focus on individuals or government agencies, often at the state and federal level, and their role as policy entrepreneurs. This case study focuses on local

policymaking and investigates how the characteristics of policy entrepreneurship may be shared across organizations, providing another way to conceive of entrepreneurism. This model of shared policy entrepreneurism is helpful in conceptualizing how LHDs may engage in other local SDH policy areas, especially if they are building their capacity in the policy arena and do not possess all of the characteristics of a policy entrepreneur or if their entrepreneurship role is limited by their political context or other factors.

A central focus of policy entrepreneurs is using communication to influence agendas, although communication strategy is just one component of a successful campaign and is more effective when embedded in ongoing organizing efforts.[67,68] Political scientist Deborah Stone states that communication, including metaphors and the expression of values, strongly influences policy.[69] She describes how language and framing[g] can have a considerable effect on policy decisions, calling policymaking the "struggle over ideas."[69] She describes how decisions made across the continuum of the policy process—from elite decision-makers to the public—are driven by the unconscious emotions, values, and agendas rather than a rational process.[69] Additionally, elites have traditionally played the largest role in framing issues because they often have the power to influence media and framing.[67,71] Research indicates that policy entrepreneurs can engage in communication that provides a more equitable "struggle over ideas."[67,71]

Baumgartner and Jones discuss how evolving issue definitions can move an issue onto the public agenda because it mobilizes people who were previously disinterested to become engaged, creating instability in the political process and providing an opening for policy change.[72] Mintrom and Norman state that policy entrepreneurs can present "evidence in ways that suggest a crisis is at hand, finding ways to highlight failures of current policy setting, and drawing support from actors beyond the immediate scope of the problem."[66] In addition to defining policy problems in ways that attract policymakers' attention and engages new stakeholders, policy entrepreneurs can define problems in ways that "indicate appropriate policy responses."[65] Accordingly, reframing foreclosure as a public health crisis may help create a broader base of engagement, which can help move a policy onto the governmental agenda and create an opportunity to propose solutions that are grounded in a health equity framework. By making the SDH normative frame concrete through policy action, LHDs may be in prime positions to help move critical social issues that drive health inequities onto local policy agendas and create support for and capacity to use a structural racialization lens in policy change.

In summary, as more LHDs are engaging in policy change related to SDH, such as foreclosure, there are a growing number of anecdotal success stories.[7,73] However, there is little research on how LHD involvement affects policy agendas and what policy entrepreneurship looks like in LHDs, including challenges entrepreneurs face, especially in communicating these complex issues. Additionally, little research has tied political science theories about policymaking specifically to SDH and health equity utilizing a structural racialization lens.[15] While additional

[g] Robert Entman states that, "To **frame** is to select some aspects of a perceived reality and make them more salient in a communicating text, in such a way as to promote a particular problem definition, causal interpretation, moral evaluation, and/or treatment recommendation for the item described."[70]

case studies of LHD engagement in foreclosure, housing, and other SDH policy are needed, this research is an effort to address these research gaps by providing a case study of ACPHD and their partners' involvement in local policy related to foreclosure.

METHODS

As little research has been conducted on LHDs role in addressing foreclosure, the case study approach is an appropriate research method. Baxter and Jack summarize Yin's extensive work on case studies, stating:

> According to Yin (2003) a case study design should be considered when: (a) the focus of the study is to answer "how" and "why" questions; (b) you cannot manipulate the behaviour of those involved in the study; (c) you want to cover contextual conditions because you believe they are relevant to the phenomenon under study; or (d) the boundaries are not clear between the phenomenon and context.[74]

These four considerations hold true in ACPHD's work on foreclosure. To develop a case study of how ACPHD engaged in local policymaking processes, I conducted semi-structured qualitative interviews with current and former ACPHD staff and partners who worked on foreclosure and housing policy.

Participants

I interviewed 11 participants, including seven current or former ACPHD staff and four staff from local or national partners who had worked with ACPHD on foreclosure and housing issues or could speak to their impact on the broader public health field. To identify interviewees, I relied on my experience in working at ACPHD for more than nine years. While I was not a lead on the foreclosure or housing work, I worked closely with staff leads, allowing me to identify initial interviewees through purposive and snowball recruitment, with interviewees also suggesting additional interviewees. Because the policy process involves many other players aside from ACPHD, it was important to interview partners who can offer differing perspectives, including critiques of ACPHD's involvement. During the interviews, I provided information on informed consent both verbally and in writing to interviewees. While I do name ACPHD directly in this research, identifiable information of individuals has been removed from the data, including the names of partner organizations and of interviewees quoted.[h]

Procedure

I developed a semi-structured interview guide based on my research questions, theoretical frameworks, themes identified through a previous national survey of LHDs related to foreclosure, and research and resources related to LHDs engaging in work to achieve health equity.[6,17,25,75–77] I also utilized my firsthand knowledge from working in a LHD and discussing these issues over many years with colleagues within ACPHD and in LHDs across the country.

[h] As I did not ask interviewees to identify their gender during the interviews, and to protect the identify of respondents, I refer to all respondents with the pronoun "they."

Members of my dissertation committee and three former LHD staff who have worked on addressing SDH provided feedback on the interview guide.

Analysis

After obtaining approval from interviewees, I recorded the interviews. Using Dedoose, I coded the transcribed interviews using an inductive/deductive coding approach, meaning I started the deductive coding process with *a priori* codes related to my theoretical frameworks, such as "communication strategy" or "agenda-setting." I added, modified, and collapsed codes throughout the process to capture emergent themes.[78] During the initial phase of analysis, I worked closely with another researcher in the University of California, Berkeley's Doctor of Public Health Program to develop a codebook, starting with us reading and coding interviews together to develop initial codes, and then coding separately, comparing and adapting codes, and developing the final codes and codebook. The researcher was only able to review a sample of interviews; however, they reviewed my findings and themes and we reconciled differing perspectives related to coding and discussed what themes to highlight in the presentation of results in this paper.[79] I also presented main themes to my dissertation committee and sought feedback. Additionally, I provided interviewees with a draft of this paper to seek their feedback and provide alternative perspectives on themes I identified.

RESULTS

Interviewees offered their perspectives on ACPHD's involvement in local foreclosure policy, discussing: 1) ACPHD's shared policy entrepreneur role in local policymaking; and 2) how ACPHD used this role to engage in communication to move foreclosure and health equity related solutions onto the policy agenda. Though a case study cannot prove that ACPHD made a difference in the policymaking process, it does provide insight into how LHDs may engage in SDH policy, including perceived outcomes and challenges.

A central finding from this research is the shared policy entrepreneur role that emerged from the data. ACPHD worked with numerous partners on housing policy and interviewees described an especially strong partnership with Causa Justa::Just Cause (CJJC), a multi-racial grassroots organization that builds community leadership to achieve justice for low-income San Francisco and Oakland residents. In many instances, interviewees described CJJC and other community based organizations (CBOs) as leading the housing policy efforts in Oakland. Although interviewees described ACPHD as exemplifying many of the traits of a policy entrepreneur, this was often deeply woven into their partnership with CJJC and other housing and tenants rights organizations. For example, when one interviewee was asked why ACPHD has been able to engage in housing policy, they stated, "I think it's their relationships with the grassroots organizers. It gives them a strong moral compass and direction." ACPHD was able to enter into housing policy while still building its capacity as a policy entrepreneur through this shared model. Additionally, while CJJC was already functioning in a policy entrepreneur role before ACPHD began its foray into housing policy, interviewees described ACPHD and CJJC playing complimentary roles that collectively led to greater impact on agenda-setting than either organization could achieve alone.

From 2006 to the present, by engaging in this shared policy entrepreneur model, ACPHD was able to expand its role as an LHD and support several policies related to foreclosure and housing, including: preventing displacement from specific development projects; preventing water shutoffs for tenants in foreclosed properties where banks had taken over but were not paying water bills; advocating for a Vacant Property Registration in Oakland that holds banks accountable for registering and maintaining foreclosed properties; revising Oakland's Linked Banking Ordinance to include considerations about predatory lending in the city's decision about which bank it uses; supporting a Tenant Protection Ordinance to prevent landlord harassment; supporting rent control protections; and addressing habitability issues for tenants.[i]

1. ACPHD's shared policy entrepreneur role in the policymaking process

Interviewees described multiple examples of ACPHD's work that align with the definition of a policy entrepreneur and how through this shared role, they were able to influence the local policy agenda in Oakland. As described in the theoretical frameworks section, research on policy entrepreneurs has identified key roles they often play in agenda-setting, including: networking in policy circles to build knowledge and develop ways to share their ideas, building coalitions, pressing for significant change, seizing windows of opportunity, identifying problems, and moving both problems and proposed solutions onto government agendas. Two other areas—investing resources and taking risks—were described thoroughly in a previous paper on ACPHD's work (see Chapter 4).[61]

A. Networking and coalition-building: Interviewees described networking and coalition-building as particularly relevant in engaging in foreclosure policy. It was critical for ACPHD to network with other organizations that had housing policy expertise, a strong membership base, and connections to specific neighborhoods that were hard hit by foreclosure. While LHDs engage in policy around more traditional public health areas, such as tobacco prevention, housing was a newer area for ACPHD. Building a network helped ACPHD staff understand the complexity of the foreclosure crisis, identify potential solutions that aligned with their health equity framework, and determine an effective role they could play in the agenda-setting process. One interviewee noted:

> *It was through the partnership with the community group that helped us focus on what kind of value we could bring to this work as a public agency with specific credibility and power. Without them helping us figure that out, helping us access it, and push our own systems, I don't think the work [within ACPHD] would have necessarily progressed.*

This provides an example of the shared policy entrepreneur role—many of the networks and coalitions existed before ACPHD became involved and this infrastructure greatly assisted ACPHD's entrée into housing policy. ACPHD also proactively pursued these partnership opportunities with the recognition that it would build their ability to address health inequities related to housing policy. Partner organizations triggered ACPHD's engagement in multiple policy campaigns and alerted ACPHD to policy windows of opportunity, such as stopping water

[i] These policies are described in greater detail in a previous paper.[61]

shutoffs and passing the Vacant Property Registration Ordinance, the latter of which also included coalition partners such as CJJC, California Reinvestment Coalition, Alliance of Californians for Community Empowerment, Oakland Community Organizations, and the Service Employees International Union Local 1021.[80,81]

In addition to ACPHD's first forays into housing policy being instigated by community groups, there was also a clear connection to health in the first policies they worked on, such as the displacement of several elderly Chinese residents in an apartment complex in Oakland and the water shutoffs.[61,82] This allowed them to incrementally build their networks, capacity, and knowledge and normalized their presence in a broader network of CBOs and government partners. While there were multiple policies ACPHD could have become engaged in, they used these networks to enter into a new policy area and picked policy "battles" that were within the limits of their credibility before moving onto more complex housing issues, such as displacement. One interviewee described how it was important to engage in multiple networks to build their role as a policy entrepreneur:

> *You start normalizing your presence at certain tables and I think that's incredibly helpful...I would say if you're starting out this work, be as present as possible in as many places as possible so people get used to your presence. Obviously it's important not to over saturate...But I think it was really important...to be at a lot of tables and a lot of meetings...in a way that builds credibility.*

B. Identifying problems: Interviewees also noted that ACPHD brought specific problem identification skills into these networks. While CBOs and other agencies were already moving foreclosure issues onto policy agendas and had a strong base of residents who could describe how the crisis personally affected their lives, ACPHD's data analysis capacity was helpful in understanding the impact of the foreclosure crisis in Alameda County. As the policy focus shifted to other housing issues, ACPHD staff were able to continue to build partnerships, gain access to data, and analyze it, as when they brought together four different data sets from various organizations to pinpoint where habitability issues, such as mold, were clustered. Interviewees described several instances of ACPHD moving into new policy territory and building a research base around each new issue as a first step. Staff often created a report, presentation, handout, or memo that provided staff and partners with research and data to inform policy discussions and communication materials, such as testimonies or letters.[31,32,83–85] It also helped them identify what data would be helpful, but was currently unavailable, allowing staff to create plans for collecting data or obtaining data sets. Interviewees noted that developing materials that highlighted problems and potential solutions allowed them to incrementally build capacity towards taking on more complex issues. Co-authoring two in-depth reports on foreclosure[31,32] set a basis for extended policy work, as one interviewee described:

> *I think this research really helped to galvanize our partnerships...and gave us some credibility in knowing how to look at a complex issue like foreclosures and then partner meaningfully, communicate I think somewhat effectively, and then make some differences in the end...I think it also gave us internal confidence that we can do this kind*

of work. I don't know without the foreclosure report that we would have had the opportunity or the chutzpah or the guts to take on an issue like gentrification and displacement and health. I don't think that would have happened without the foreclosure report.

C. Working towards significant change: Through their shared policy entrepreneur role, ACPHD has also been able to press for significant change. Interviewees noted that the framework for health equity was essential in understanding foreclosure in a broader context and developing a vision for significant change that went beyond the current policy campaign. One interviewee described how they received grant-funded technical assistance from a politically savvy non-profit that pushed them to embed their short-term policy goal in long-term change:

[The technical assistance provider] was constantly telling us, 'This is your policy target. This is the issue you are trying to address right this minute or in the next two years, but what after that? What is this building towards?' And so thinking about what you're working on as building to the next broader issue that you want to take on is good because you have a more macro, a bigger strategy.

While ACPHD's framework firmly supported policy solutions that would entail significant change, this is another area where interviewees emphasized the importance of a shared policy entrepreneur role. By combining resources and strengths, the organizations had greater collective impact, making it easier to engage in challenging issues and push for significant change.

D. Seizing windows of opportunity & proposing solutions: ACPHD was also able to seize windows of opportunity and emphasize solutions that aligned with its health equity framework. Again, this was often by taking cues from partners and by having a base of research on foreclosure and housing issues, as well as having staffing capacity and leadership support. ACPHD leadership prioritized resources and staffing to develop the foreclosure reports with CJJC while foreclosure was still in the news and on policymakers' agendas. ACPHD also provided research, testimonies, and letters based on policy timelines, which often demand a quick response. This required developing internal policies for rapidly responding to partner requests for testimony or comment letters, including obtaining approval from ACPHD's Health Officer as well as the Director of Alameda County Healthcare Services Agency.

In describing why ACPHD moved forward in supporting partners' work on the Vacant Property Registration Ordinance, interviewees noted there was a window of opportunity to move the policy forward, which included partners identifying it as a winnable policy, having examples from other jurisdictions, and that it was already on policymakers' radar at both the city and county level. As partners led the campaign to pass the ordinance, ACPHD was ready to act, having conducted analysis on the health impacts and research on other jurisdictions' policies. One interviewee noted that the coalition moved forward on it because:

That's the one they thought they would win. First of all, it became politically viable because there are all these foreclosed properties...and constituents called their council members and complained so politicians wanted something done...And it focuses on who is responsible...on the banks, on the financial system, and making them pay the price for what they did verses making the city pay the price...

Thus, this was a window of opportunity and it also aligned with a longer-term strategy of holding banks accountable for their role in the foreclosure crisis. ACPHD prioritized supporting the coalition's work on the ordinance, which passed and netted the city of Oakland over $1.6 million from banks in its first 18 months to reduce blight.[75]

E. Using authority and power: In this shared policy entrepreneur model, one important asset that ACPHD brought to partnerships was both their formal and informal authority, which it used in the agenda-setting process. This can be a unique strength LHDs bring to a coalition of CBOs and other governmental agencies. For example, the ACPHD Health Officer declared a health emergency around the water shutoffs and staff secured meetings with key people in governmental positions who could move forward on a plan to place liens on banks. Interviewees noted that this formal authority, coupled with the credibility, data analysis, and health lens that ACPHD brought, was helpful in moving both problems and proposed solutions onto policy agendas. As one interviewee described, at certain meetings, "It was a symbolic thing. It was a powerful thing to have public health at the table" as a public entity. Another interviewee stated it created "urgency and broader accountability."

F. Outcomes: While this study is not an evaluation of ACPHD's impact, understanding more about interviewees' perception of positive outcomes provides insight into how ACPHD's involvement may have influenced the policy process. In describing the impact of the work, interviewees use language that suggests transformational change—meaning it affects the people and structures involved—rather than primarily transactional change, which might include a policy win, but doesn't transform people or systems.[86] For example, one interviewee stated:

I personally think there was a tremendous amount of value from just merely engaging in the work...I think it is incredibly important to know that the agency that you're working for or with doesn't shy away from these battles with structural forces and even if you don't always end up the victor, or you can't really wrestle with that concept, merely engaging in these conversations, I think it's really, really important. And I think that building yourself up as an institution that does represent the interest of those who are disproportionately impacted by structural forces and who have consistently historically poor health outcomes, I think that's incredibly powerful.

Interviewees also described being considered a good partner and ally and working well with other organizations as an accomplishment. At times, interviewees noted their contributions were less related to a specific skill sets or public health knowledge, but more to providing capacity and absorbing work when other partners were stretched thin.

Partner organizations described positive impacts as well, including how public health foundations are starting to fund CBOs that directly work on housing issues, allowing them to expand their work and deepen their resident engagement. They acknowledged several other organizations in the Bay area are working at the intersection of housing and health; thus, it's challenging to attribute this change directly to the health department. However, they did think that ACPHD was part of a broader movement to expand the scope of public health work to include SDH, creating opportunities for greater connections, partnership, and impact. Finally, both ACPHD staff and partners thought an important outcome is providing an example of how LHDs, and more broadly government, can work with CBOs in innovative ways:

> *I think that it is very helpful for our work to have an example of a progressive and hopeful relationship between a public agency and community organization that is fighting for change and justice. I think that historically, many people, on each of those sides, so the public sector side and then the social justice side, would probably perceive that relationship to be completely antagonistic. And that if you were for justice and if you are for change, that it is unlikely you could have any meaningful or helpful relationship to a public agency. And then conceivably I know that there are many public agencies who would be very hesitant to even open up the possibility of talking or working so closely or engaging, so deeply [with a progressive organization]...I think that it is helpful and is good and it's interesting to explore what's possible when you can imagine a different type of relationship between two types of entities.*

Challenges: Interviewees brought up several challenges related to moving issues onto a policy agenda and staying engaged in the process. They noted that foreclosure and housing policy are complex and required an intense learning curve. While ACPHD was part of passing several policies in Oakland, they noted that "banks are powerful adversaries and it's hard to hold them accountable." Additionally, the nature of policy work itself is challenging. Windows of opportunity shift and during the several years discussed in the interviews, viable opportunities to affect the policy agenda shifted from a focus on foreclosure to a focus on habitability and development. While this shift also reflects the context of Oakland and Alameda County, it means that ACPHD staff need to continuously research new areas, including related health outcome data and potential solutions, and quickly understand a moving landscape. Again, by using a shared policy entrepreneur model, ACPHD has been able to rely on its partners who are deeply engaged in housing policy to help them understand this shifting landscape.

Interviewees also noted they were not always privy to contextual politics that affected the agenda-setting process, and while they relied on partners to stay informed, developing connections to and understandings of local politics was important. Additionally, in ACPHD's approach, policy staff also strive to engage programmatic and service staff throughout the health department through these shifting timelines, which can be challenging. As one interviewee noted, policy work has "...moments where you have a tremendous amount of work and then there is a lot of hurry up and wait. Because to some degree, you're waiting on people

in other agencies, elected officials to respond to certain requests. It's just the life cycle of policy. It ebbs and flows and a big part of [the] job was also keeping people engaged in the work."

2. Communication and agenda-setting

Interviewees described how communication was an important part of ACPHD's role as a policy entrepreneur, including developing an implicit communication strategy and framing the issue.

A. Communication Strategy: A communication strategy derives from an overall strategy in which "advocates must define the problem they seek to solve, name a specific solution they believe will help address the problem, and identify which individual or body has the power to create the change they seek."[87] Several interviewees noted that on ACPHD did not have a planned or explicit communication strategy. However, many interviewees described an implicit strategy and shared similar perspectives about what this entailed. In terms of the overall strategy, there was clarity about specific policies it wanted to move onto the agenda, such as passing the Vacant Property Registration Ordinance and Linked Banking Ordinance. There was also consensus about which decision-makers had the power to change or enact the policy.

Another aspect of a communication strategy is determining which audiences are important to reach in achieving the overall strategy. While communication strategies typically target key policymakers and the stakeholders that can persuade them,[87,88] in this case study, interviewees described engaging numerous audiences. Interviewees noted several key audiences as well as differing goals for each audience, including:

- Continually increasing the base of concerned stakeholders who are ready to act on foreclosure issues by reaching out to *residents and members of base-building CBOs*. CJJC and other partners were the primary connection to residents rather than ACPHD;
- Ensuring *ACPHD staff*, especially leadership, were informed and supportive of the policy work;
- Influencing *policymakers* to support specific policies. In several instances, there were policymakers already in support of the policies and the communication strategy was related to keeping the issue on the agenda and ensuring the policy was implemented;
- Building relationships with *administrative staff and leaders in other local government agencies* to create a shared understanding of the issues and shift administrative policies and practices;
- Building partnerships with *CBOs* working on foreclosure and housing issues to create a broader coalition;
- ACPHD sometimes had a specific role of *bridging government agencies and CBOs*, as they had good relationships and were trusted by both groups, even when there was disagreement in the policy process;
- Communicating with *federal government agencies and non-profits* to help shape public health approaches to addressing housing and foreclosure throughout the country;
- Connecting to other *LHDs or coalitions that work with LHDs* to provide examples of strong CBO/LHD partnerships focused on housing and health that could be a model for

other jurisdictions, building a stronger movement for housing and health in California and the U.S.;
- Providing *funding agencies* with examples of successful and non-traditional partnerships that positively impacted public health through housing policy, with the goal of increasing funding support for similar approaches;

Interviewees also described the importance of messengers, or who is communicating the message. Multiple interviewees stressed the significance of resident stories, as one noted, "Our organizing partners were incredibly helpful because they could get stories of real people that were impacted by these things and they were hard hitting stories." Both ACPHD staff and partners noted that at key moments, such as the report release, having ACPHD leadership speak was powerful and illustrated that foreclosure was a critical issue that should be on the policy agenda.[89,90] This was echoed by another interviewee, who stated, "...having department leadership as media spokespeople was huge...having actual department leadership, who were visible spokespeople was very crucial and very critical and provided the recommendations, and analysis, and framework with a lot of credibility because I think it helps to have someone who's name starts with doctor." One partner noted what made ACPHD's testimony on multiple policies powerful was the messengers, which ranged from leadership to direct service providers: "To be honest, it's when you have doctors and nurses. People who see. Who are on the front lines of the service actually speaking about their experiences and making the connection to a policy argument. That to me is very powerful. And it's rare and it's unique."

Interviewees noted that ACPHD addressed gaps in its own capacity by working with partners and especially in early work, communication efforts were led by CJJC. For example, CJJC staged the foreclosure report release, creating a large event in front of a home that was being foreclosed on, mobilizing community residents to attend and speak, and directing ACPHD on how their presence could be helpful. This garnered news media coverage from multiple print, television, and radio outlets.[89–92] As it grew more experienced and had more staff working on policy issues, ACPHD was able to move into developing proactive communication strategies. For example, to applaud the city council's actions on the Linked Banking Ordinance and continue to build a SDH narrative, staff worked to get an op-ed from Health Officer and Director Muntu Davis in the *Oakland Tribune*, which described the ordinance as a public health intervention.[93] Finally, because CJJC and ACPHD made the foreclosure reports available online, one partner noted that this had more of an impact on the broader field of public health because it could be widely and freely disseminated.

B. Issue framing and key messages: Interviewees described several key frames and messages they consistently reiterated as part of their implicit communication strategy. An overarching goal was to reframe foreclosure as a public health issue, rather than just an economic issue. This included emphasizing that foreclosures affect community health in addition to individual health and that the foreclosure crisis was structurally, rather than individually driven, and that this was highly racialized issue. One interviewee described the key messages as: "foreclosures concentrate in certain places," there's "health consequences in terms of both the individual level but also at a community level in terms of the sense of community and community

relationships it destroys," and that it is clearly a health issue and to address it, "we really need to change policies that created the foreclosure crisis to begin with." They discussed how this means making the banking and financial sector's role in the crisis visible, as well as "the structural arrangements that were in place that really disproportionately impacted people of color, and people of color living in particular areas."

In addition to discussing foreclosure as a structural, rather than individual issue, interviewees noted that they also wanted to link foreclosure to a broader system that marginalizes people of color and low-income communities and affects health, with foreclosure being just one way that this marginalization happens. One interviewee described that there were certain questions that drove their communication approach: "how do we make it clear... that it's not just about a fight between landlords and tenants? That this is part of the larger macro pattern of aggression against low-income people as a result of a set of economic policies and decisions that don't take the interest of low income people to heart?" Another interviewee echoed the goal of connecting the foreclosure story to broader structural arrangements while also focusing on a vision of a better future: "What is the more macro-level story that you are trying to drive? It's the foreclosure crisis that's linked to this bigger issue. This is symbolic of bigger things, and this is really what we are trying to do. Our vision is to get to a more inclusive society."

Interviewees described how for ACPHD, it was critical to stay focused on the health angle and to use rigorous research and data analysis methods. Interviewees noted that each partner brought different assets to the process, and that ACPHD was viewed as credible and data-driven. For ACPHD to continue to serve as a powerful ally, it was important to maintain this credibility. One interviewee stated:

> *I felt that we're pretty fastidious about that and about documenting it. We knew that if we weren't and somehow scrutiny came on us, if we lost our credibility, that it was not just bad for us...But then all of a sudden, this resource that's been very useful for the community disappears and we didn't want to jeopardize that. It's too important.*

Additionally, as one interviewee described, much of ACPHD's communication was directly with administrative staff and the leadership of city and county agencies, which meant very targeted communication materials that utilized the language of other sectors and was more data-driven than materials that they might develop for the public.

Interviewees also noted that CJJC brought a connection to residents and an ability to translate information into compelling language. One interviewee noted that the connection to community members was critical in fully understanding the foreclosure crisis and its impacts, and that a key goal of any LHD involved in policy should be to "lift up" resident voices. Another interviewee described how the partnership led to a successful report release because it included "community residents talking about their personal experiences of foreclosure and how it impacted their health," "broad groups of community residents shouting 'cough, cough, achoo, foreclosures are bad for you,'" combined with the health officer talking about the research findings showing there was credible evidence that "foreclosures make you sick." CJJC

created the chants that engaged people at events—this was not a skill that ACPHD staff had, nor did it fit within their role, but it made events more powerful. One partner also spoke about the importance of being aligned around communication strategies and approach, recognizing the different roles for various organizations and the importance of the:

> *...stories and the centrality of people most impacted and that was carried through in terms of media spokespeople and the story that we were putting out. That we were not just telling it from this framework of data and research and analysis, but actually from a place of also telling the story of how real people were being affected and what they were doing about it. And I think the fact that we agreed that that was the way to do it, meant that we played different roles and played different expertise, but actually made the communications much stronger.*

In terms of communicating about structural racialization, one interviewee described how although ACPHD did have a focus on racial inequities in health, because CJJC's framework is deeply grounded in understanding and addressing structural racialization and housing, that this influenced the reports and communication and provided ACPHD an opportunity to increase their capacity in communicating about structural racialization. Another interviewee noted that in the Bay area, it was not as controversial for an LHD to communicate about racially predatory lending and the legacy of segregation as it might be in some areas since similar stories had been in the news.

C. Outcomes: While it is challenging to evaluate the actual impact of ACPHD's communication on agenda-setting, interviewees discussed several perceived outcomes. There was consensus among interviewees that the health frame was helpful in moving foreclosure onto the policy agenda. Previously, CJJC stated that the "health lens brings a sense of objectivity, credibility, and urgency to issues."[75] One interviewee noted:

> *...I think the health frame...not just from a policy perspective, but from I think the communications and media perspective is actually really a good frame. It's a very no-brainer frame, right? Who would say you're against health? Who would think that health is not a good idea? Or more healthfulness is not better? So I think that we got more coverage as a result of not just talking about foreclosure or not just talking about gentrification, but talking about the relationship between foreclosure and health and gentrification and health. I think the health frame created more space, got more coverage, and opened more doors for people who I think would have been much more hesitant to just cover something about foreclosure or something that was just about gentrification.*

Recognizing the importance of the health frame, one partner also discussed how LHDs also have technical skills that can be beneficial to CBOs and those working on policy:

> *I think the health department is a particularly interesting agency because on the one hand there is so much about health access, health equity, the health frame that has a*

social justice perspective that is built into it. And in many ways that framework allows or creates opportunity for the department to take a much more progressive stance on many issues and many policy fights. And then the fact that that work comes with an ability to access research and data to back up arguments and to back up policy recommendations. The ability to produce maps. There's a technical component to what the health department has within its purview and has within its toolkit that actually is very compelling to policymakers because it's not just a moral argument. But there's actually data and statistics and a backup component that I think the health department can bring that is actually helpful in moving policymakers to some extent.

Several interviewees stated that ACPHD "legitimized" the issue, noting that residents and advocates had long recognized and claimed that foreclosure and limited housing options have a health impact, but having public health involved "tipped the scales." One interviewee noted:

It's not like Alameda County Public Health Department recognized this and nobody else did. It was the fact that we stood up on it and legitimized the claims of people that had been saying these things for a long time. And that leverages power and gives them the ability to get attention to an issue. In public policy, it's all about raising the profile of an issue so you can get it agendized. It's not just identifying issues. You can identify issues all day. It's raising the profile, getting attention, getting media attention, getting policymaker attention, so that they are forced to act. And so our role was really this sort of leverage and getting that profile of the issue raised.

This was echoed by another interviewee, who stated that the health department's involvement:

...meant that [the work was] credible to a larger audience, and more specifically some of the more established media outlets and media sources who I think would have either not been as interested or concerned about something that was being put out by a community organization. So I think that having the department involved in the communication strategy...was huge, because it got...recognition and coverage from sources that [a community organization] would not have.

Interviewees noted that in addition to raising the profile of how foreclosures affect health, CJJC and ACPHD provided an example to those in the public health and housing fields of how a shared policy entrepreneur model that includes government and CBOs can help move issues onto policy agendas and lead to policy successes. One interviewee described how ACPHD was invited to present to the U.S. Department of Housing and Urban Development and Health Resources and Services Administration and that it was the only government agency that co-presented with a community partner. Another interviewee described how LHDs and other public health organizations across the country had discussed the report and that it provided an "example of all the ways in which particularly racism was at work in directly influencing health outcomes." They also noted that in addition to demonstrating the link between foreclosure and

health, it created a model for how LHDs can engage in research and policy work with community organizations.

D. Challenges: Interviewees also described several challenges or needs related to communication. Overall, interviewees noted that ACPHD could have developed a more explicit and proactive communication plan to guide the work, including understanding how the issue was currently portrayed in the media and how it would ideally be framed to advance ACPHD and partners' goals. One interviewee noted that ACPHD's planning "...was a little ad hoc," and that it would have been helpful to have a comprehensive communication plan and a point person focused on communication to leverage the report, making sure it reached key people. Another interviewee spoke about how while ACPHD's communication strategy could have been improved, the partnership addressed some of ACPHD's communication gaps, and that CJJC was "a bit more savvy in terms of how to talk about it, how to cut an issue, and how to talk about it so that you get popular support."

In terms of working with partners, one interviewee noted that communication planning was informal but successful because there was a high level of trust. However, they noted that this might not be the case for all LHDs or that as ACPHD's work evolves, it will be important to have an "explicit conversation [with partners] around what is a communication strategy? What are our key messages? Who are the key spokespeople? What are our agreements around fielding media requests?" When ACPHD's work expanded beyond just one partner to being part of a coalition, one interviewee noted there was sometimes a lack of clarity around the purpose of garnering media attention as well as having the commitment needed to move a communication plan forward.

In terms of applying the health frame to a SDH, interviewees noted that for most audiences, it was fairly easy to understand the connection between foreclosure and health. For other policy issues LHDs may work on, the connection to health will not be as intuitive and using a health frame will require additional effort. Additionally, prominent news coverage of foreclosures helped create a window of opportunity for ACPHD and partners to garner media coverage and move their solutions onto the policy agenda. Interviewees noted that this was similar to a brief report that ACPHD produced in 2012 on income inequality—the media's focus on the Occupy movement and the organizing happening in the Bay area created an interest in the report and it was widely used by both advocates and policymakers. However, interviewees noted that not all SDH will be widely featured in the news and for some issues, garnering interest and media coverage will be more challenging.

One interviewee noted that by producing reports, data, testimony, and other materials, LHDs are moving into a different role on SDH policy than they typically have played and that "the minute you go from passive to proactive, you enter the political arena with it." While they felt ACPHD leadership supported this proactive approach, they noted it was a shift for the department and that while foreclosure policy was not very controversial, this may not be the case with every issue or with every jurisdiction. As there are anecdotal reports of LHDs, or individuals within them, facing political or media repercussions, this is an important

consideration. Interviewees noted that there was some concern about aligning closely with a progressive CBO and what that meant for the tone of reports and ACPHD's role in press events. One interviewee described how context matters and that "policymakers in Oakland may be bombarded with these messages every day, but if you go out to the outlying suburbs, they might be like 'oh, what does this have to do with health?'"

In terms of communicating about foreclosure using a structural racialization frame, interviewees noted that it is a challenging area of communication. One interviewee discussed how there had been opportunities for ACPHD staff and partners to receive communication training and technical assistance, but that it could be more institutionalized within the department, including how to talk about the racialized causes and outcomes of SDH. Another interviewee noted ACPHD often presents data showing that communities of color are most impacted by issues such as foreclosure, but that more could be done to use a structural racialization lens to describe not just health outcomes, but policies and institutional practices that lead to the outcomes. One interviewee noted that because structural racialization is discussed within ACPHD and with partners, staff can assume that everyone is working from the same framework and that presenting outcome data illustrates the structural roots of inequity. However, they stated there is a continual need to be explicit about structural racialization as a cause of health inequities and to develop capacity around institutionalizing it in all communication. Another interviewee noted that ACPHD has a strong structural racialization approach when ACPHD is "in equal relationship or it's actually the community partner leading," which they believed comes across in reports. However, they stated it's less clear if ACPHD applies a structural racialization lens when it is leading the work or it's related to internal county decisions, such as budget decisions.

DISCUSSION

The purpose of this research is to provide a case study of one LHD's role in engaging in local SDH policy. Previous research indicates that there are other LHDs that are engaging in or would like to move into similar work, but there are few models or descriptions of this work to aid them, especially utilizing frameworks that can help explain LHDs' role in the policymaking process.[25,61] Thus, this research is a purposeful effort to understand and disseminate one LHD's approach as a way to increase innovative work and build capacity among LHDs.

As described, a central finding is that this case study provides an evolving model of policy entrepreneurship that includes a sharing of resources and strengths. Based on interviewees' statements, this also creates a greater ability to influence policy agendas. ACPHD exemplified some aspects of a policy entrepreneur, including a desire on the part of staff to, "significantly change current ways of doing things," by intentionally focus on engaging in SDH policy.[66] However, this movement into a policy entrepreneur role was greatly facilitated and strengthened by sharing other attributes of entrepreneurship across organizations.

As many studies of policy entrepreneurs take place at the state or federal level, one question this case study raises is whether the shared policy entrepreneur model may be connected to the local policy focus. As ACPHD engaged in local policy, it may not have had the resources that

state and federal agencies have and may have faced different political contexts. It also had an opportunity to work with a CBO that was engaged in building a base of residents from neighborhoods deeply impacted by the foreclosure crisis, which may differ from state and federal campaign partnerships. Out of this context and these specific needs, they created an innovative and effective approach for a health department to move into local housing policy.

In addition to providing a model of shared entrepreneurship, the findings show that LHDs can play a role in addressing SDH through policy while taking into account many of the factors that Krieger and Hofrichter describe in their frameworks, such as the need to address power differentials and support leadership from the communities most marginalized by present structural arrangements. While ACPHD was reacting to the crisis rather than preventing it from occurring, or as one interviewee noted, "while foreclosures are very clearly downstream, it's upstream for public health," they did seek to hold powerful institutions accountable for their role in harming the public's health and prioritized resident leadership through their partnerships with base-building groups. Additionally, this case study illustrates that LHDs can engage in local policy seeking to address structural racialization. However, as apparent in ACPHD's work, this is challenging and there is a continued need to support LHDs and their partners in this approach.

Interviewees also described the assets ACPHD was able to bring as a policy entrepreneur to the communication process, noting unique contributions they made. Mintrom and Norman state that, "Getting people to see new problems, or to see old problems in one way rather than another, is a major conceptual and political accomplishment...For policy entrepreneurs, the challenge is to undermine the present policy images and create new ones that emphasize major problems and a need for change."[66] Interviewees described both the health equity framework that ACPHD works within and the set of technical skills it contributes as helpful in reframing foreclosure as a public health issue, generating broader media coverage of the issue, and helping move it onto the policy agenda in several venues. In this case study, the health lens highlighted the long-term and community-wide effects of foreclosure. Reframing foreclosure as a public health issue created an opportunity for proposing solutions that moved beyond addressing individual needs to solutions that focused on supporting communities and holding the financial sector accountable for its impact on public health. The ability to take the rhetoric of a SDH approach and translate it into action was a significant and innovative change in ACPHD's approach.

Implications for practice and research

While this research provides some insight into how one LHD engaged in agenda-setting in a shared policy entrepreneur role, it also raises many considerations for practice and research. Generally, additional research on how other LHDs are approaching policy work related to foreclosure and housing is essential, especially in diverse contexts. This should include seeking to understand more about LHDs' potential role as policy entrepreneurs, their impact on agenda-setting, and their communication approaches, including what has worked well and what has been less effective. It will be particularly important to see if a shared policy

entrepreneur role appears in other cases and if it does not, if and how LHDs function on their own as a policy entrepreneur.

Additionally, it is important to conduct research in areas with different political and historical contexts. In this case study, interviewees described Oakland's "dense eco-system" of housing and advocacy organizations, with deep connections to residents and a long history of sophisticated organizing, as well as CBOs who had willingness to invest their time and energy into developing a partnership with an LHD. However, partnerships may look very different in other areas of the country. Where there is not a network of housing and tenants' rights organizations, or even in areas with a network of CBOs, can LHDs invest in building community infrastructure for residents to organize autonomously?[4] Some models from LHDs suggest they can—for example, Boston Public Health Commission developed a grant, training, and technical assistance program to build the capacity of CBOs to "develop, implement, and evaluate community-based policy and systems change strategies that address social determinants of health and reduce racial and ethnic health inequities."[94]

In researching partnerships in the policymaking process, it will also be important to understand more about the LHD role in "legitimizing" claims that residents and CBOs have long made. Interviewees, including partners, spoke positively of ACPHD's role in legitimizing claims and potentially increasing mainstream media coverage, and also detailed the aspects of the partnership that made this arrangement beneficial. This included a strong level of trust and ACPHD prioritizing resident voices in reports and as media spokespeople, rather than restricting the focus to public health "experts." However, given the grounding of SDH policy work in health equity frameworks that seek to disrupt current power arrangements, it's important to note that "legitimizing" could reinforce the same power differentials LHDs are seeking to address, where LHDs' assume "expertise" and that their approach is viewed as more legitimate than that of community partners or residents. Consistently tying LHD policy work to residents and CBOs, as well as literature, principles, and research from areas such as community-based participatory research and participatory action research is one way for researchers and practitioners to reflect on the power dynamics between LHDs, partners, and residents.[95–97]

In understanding more about how LHDs can use communication in the policy entrepreneur role to advance SDH policy, there are several areas for further research. This case study provides a general overview of one LHD's communication approach; however, in each area, such as strategy and framing, more focused research can be conducted. The communication goals that interviewees described are ambitious and complex, such as illustrating how foreclosure is connected to macro-level structural arrangements including structural racialization. While ACPHD and partners generated media attention and described important interactions with numerous audiences, further research on if and how they achieved these communication goals will help identify strengths and areas where there is room for improvement for ACPHD, partners, and other LHDs who have similar goals, messages, and strategies.

Interviewees continuously brought up that while there were challenges in engaging in policy related to foreclosure, both framing for access and framing for content were fairly easy given

the widespread media coverage of foreclosure, as well as their sense that the health impacts of losing one's home are intuitive to many people.[j] They also noted that while housing issues were on the agenda of several policymakers, this would not be the case for every issue. There are already numerous research articles and practical tools to help public health practitioners advance their communication capacity and some are focused specifically on health equity.[57,58,87,88,98] However, it will be important to continue to further research and practice to support LHDs in engaging in SDH policy, especially accounting for nuances that will affect the work, such as the complexity of various SDH and the political, geographic, and logistical contexts that LHDs work in. Building mechanisms for LHDs to share successful approaches and lessons learned can help create both a repository of examples and rapid dissemination of effective strategies.

This case study also raised an area of communication strategy that may be unique to LHDs, which is the broad array of audiences that interviewees described as communication targets. Additionally, while interviewees described specific goals and audiences for policy campaigns, in communicating to some of the wider audiences, the goals were broad and sometimes, less specific. To strategically use resources and to be effective, media advocacy campaigns typically focus on key decision-makers and mobilizing the groups who can influence these decision-makers.[87,98,99] However, ACPHD's work went beyond this and was intentionally focused on also influencing the field of public health. While interviewees discussed this as a positive achievement, it will be important to understand more about LHDs' role in communicating to multiple audiences; whether LHDs play a unique role in reaching these audiences; and if and how LHDs can balance focusing on both specific policy campaigns and influencing the broader public health field, especially if resources are limited.

Another area of research that should be expanded is the direct assessment of the effectiveness of LHD communication related to SDH and health equity. This study concentrates on ACPHD's role as a policy entrepreneur and provides a general assessment of how they utilized communication in this role. More specific research could include a content analysis of ACPHD or other LHDs' communication materials, such as reports, testimonies, and press releases, as well as media coverage related to the issues they are seeking to address, such as foreclosure, and how their approaches align with current research and practice recommendations on how to communicate about health equity.[57,58,100,100–102]

While one finding from this research is that ACPHD appeared to be effective in its communication efforts without having a very systematic approach, interviewees also described the need for a more formal communication planning. ACPHD is a well-resourced LHD that has worked on housing issues for several years. The finding that its communication planning was "ad-hoc" and could have been more intentionally and fully resourced indicates this may also be an issue for LHDs, especially those with fewer resources focused on health equity. There is research and tools available to help public health practitioners in their communication efforts;

[j] The objective of ***framing for access*** can be defined as capturing "journalists' attention by focusing on what is considered newsworthy," and the objective of ***framing for content*** can be described as reframing a "public health issue to highlight environmental factors, core values, and the desired policy solution."[87]

understanding more about LHDs' current communication capacity and approaches and barriers to utilizing these resources is another important next step.

Finally, this case study provides one example of how a LHD sought to apply an explicit racial equity lens to their work, from the policies they engaged in to their communication strategy. This is part of a growing number of jurisdictions focused on governing for racial equity, which could provide ample opportunities for advancing research and practice on how LHDs, and other government agencies, can use a policy entrepreneur role to advance racial equity.[103,104]

Limitations

As there is little research on LHDs as policy entrepreneurs and their role in agenda-setting in SDH policy, a case study is an appropriate research approach. However, there are many limitations in this study that future research can address. Comparative case studies offer the opportunity to identify areas of similarity and dissimilarity across findings from the cases and future research using a comparative case study model, or other research methods, may identify critical aspects or alternative perspectives about the role of LHDs in agenda-setting related to SDH that I did not identify in this work. However, in a national survey of LHDs, there were no respondents engaged in similar policy work related to foreclosure that could serve as comparisons.[25]

Additionally, while there are benefits to research based on qualitative interviews, there are also several limitations.[105] I have potentially excluded key ACPHD staff or partners within their network in my sample. I asked interviewees to recall past events that occurred over a wide range of time. They may have forgotten important details or may blur the timeline of events, making it hard to determine definitive relationships between actions and outcomes.[105] Interviewees may have also provided answers that frame their work in a positive light or have recall bias that shapes their responses. For example, as ACPHD has invested resources over multiple years in engaging staff in discussions about racism and communication strategy, staff may apply their current knowledge and perspectives to their earlier efforts, remembering more of an emphasis on a structural racialization approach or using effective communication techniques than actually occurred.

Another limitation is that while my position as both a researcher from UC Berkeley and ACPHD staff provided access and an understanding of a complex issue that other researchers may not have, it may have also influenced interviewee responses. While I noted in the informed consent that I would only present themes from the research and would not report identifying information in publications or to ACPHD, interviewees may have been hesitant to critique ACPHD's approach or role because of my connection to the organization.

In the analysis phase, my connection to ACPHD also provided me with insight into a complex policymaking process, but also influenced my interpretation of the data. While another researcher analyzed a sample of the interviews, assisted in the development of the codebook, and discussed themes with me, the analysis phase could have been greatly strengthened had this been a funded research project with a research team. This would have allowed for more

robust discussions of the codebook and an assessment of intercoder reliability. Future research that includes more than one LHD and a diverse research team will address many of these issues.

CONCLUSION

The foreclosure crisis is just one example of how SDH, and how they are distributed, influence health inequities. Systemic oppression and marginalization are fundamental issues that have been described, researched, and fought over throughout history, through the work of uncountable advocates, and across numerous fields of research. While addressing these entrenched systems is clearly something that the public health field, and specifically LHDs, cannot do alone, this case study supports that LHDs can take on aspects of these systems through the local policymaking process. This case study provides an example of how one LHD was able to move into a shared policy entrepreneur role, with interviewees reporting that ACPHD helped advance an effective communication approach and aided in moving foreclosure and housing issues onto local policy agendas. With approximately 2,800 LHDs across the country, working in extremely diverse contexts with varied organizational structures and staffing, it is clear that additional research is needed in understanding LHDs' potential role in addressing local SDH policy. Understanding and disseminating how other LHDs are approaching similar work, and what challenges they are facing, will be an important next step in supporting LHDs in their efforts to achieve health equity.

Public health researcher Simon Chapman notes that advocacy "seeks to change upstream factors like laws, regulations, policies and institutional practices" that can influence large numbers of individuals, yet there is a relatively little attention paid to it in public health research or training.[106] This is especially true of how LHDs may be able to serve as policy entrepreneurs, influence agendas, and communicate in a way that advances health equity. Previous research indicates there are LHDs who are already engaging in policy work related to SDH and that more are poised to engage.[25] As this case study has shown, engaging in local policy can be challenging, especially with complex issues such as the foreclosure crisis. However, public health research clearly shows that the foreclosure crisis has and will have detrimental effects on health and stands to widen already ingrained health inequities within our country. The same holds true for other SDH that are inequitably distributed based on place, race, income, and other forms of marginalization.[3] While LHDs, and the public health field, cannot take these issues on alone, this research illustrates that LHDs across the country may be able to take a more active, policy entrepreneur role in agenda-setting, and as one interviewee noted, help "tip the scales" towards concrete policy changes that shift power, create more transparent and democratic governmental structures, and move us closer to health equity.

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CONTRIBUTORS
Solange Gould helped analyze the interviews and develop the codebook. Interviewees graciously took time out their important work to meet with me and provide additional comments on drafts of the paper.

HUMAN PARTICIPANT PROTECTION
The University of California, Berkeley Institutional Review Board approved this study protocol. Online survey respondents provided informed consent to participate via the online survey.

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VI. Dissertation Conclusion

The overarching goal of my research was to examine the role of local health departments (LHD) in addressing health inequities. While LHDs differ greatly in organizational characteristics and external contexts, because they are situated in communities across the country and are the local government agencies with the responsibility of addressing public health issues, their potential role in advancing health equity cannot be understated. As interviewees noted, the public health lens that guides LHDs can be tied to a social justice perspective that is not inherent in all government agencies. Coupled with data and research capacity, as well as formal and informal authority, LHDs have the potential to play powerful roles in realizing health equity. However, while public health research has grown exponentially in its investigations of the root causes of health inequities, there is less research on potential solutions, and much less on the role of LHDs in these solutions.

To inform both research and practice, I focused on the role of LHDs in addressing health inequities through the lens of the foreclosure crisis. Further research is needed on: barriers to LHDs engaging in work related to health inequities; case studies of LHDs engaged in local policy to address other SDH or working in different political, geographic, and contextual environments; and on approaches outside of local policy that LHDs are engaged in to achieve health equity.

In the first paper, I examined how LHDs throughout the U.S. reacted to the foreclosure crisis as a public health issue by conducting a national survey and analyzing the results. While this paper was influenced by theoretical frameworks on health equity and structural racialization, during data analysis, it became apparent that the responses followed a diffusion of innovation pattern, with innovator, early adopter, early and late majority, and lagging LHDs. Respondents also displayed a high level of interest in advancing their LHD's health equity practice. This finding influenced subsequent research, as I then intentionally included a focus on ACPHD's role as an innovative LHD based on diffusion of innovation theory into the second and third papers, with the goal of increasing the rate of adoption of innovative health equity practice among LHDs.

The second paper utilizes data from interviews with current and former ACPHD staff and partners to examine how ACPHD's approach differs from traditional LHD interventions and what factors enabled ACPHD to develop their foreclosure and housing work. While theoretical frameworks on health equity elucidate how ACPHD's work to address housing and foreclosure differs from traditional LHD approaches, diffusion of innovations theory explicate factors that enabled ACPHD to develop this approach. This includes both organizational factors and aspects of the innovation that facilitated ACPHD's entrée into local housing policy. I present implications for other LHDs, including a discussion of what factors may be more within LHDs control and what factors may lie outside of the control of individual LHDs. Finally, I conclude with broader implications for public health practice and research.

In the third paper, I move forward on the premise that ACPHD is an innovative LHD in the area of housing and foreclosure policy, as illustrated in the second paper. In this paper, I focus on

ACPHD's role in local policymaking, using data from the same interviews. The case study provides insight into the potential roles LHDs can play in local SDH policy, as well as challenges. A key finding in this paper is that ACPHD exemplifies many of the qualities of a policy entrepreneur, as described in political science literature. This includes influencing local policy agendas and using communication strategically to achieve policy goals. However, in this case study, it became apparent from the data that ACPHD's policy entrepreneur role was shared across organizations. By developing a deep partnership with Causa Justa::Just Cause that extended beyond grant cycles and staffing changes, ACPHD was able to enter into local housing and foreclosure policy in Oakland before fully developing all of the qualities of a policy entrepreneur. In this way, they were able to bring their resources and a health frame to ongoing policy discussions and debates while also increasing their capacity as a policy entrepreneur. Interviewees described perceived benefits of ACPHD's involvement, including bringing a health frame to foreclosure policy and influencing local policy agendas.

In Oakland, the site of this research, a White child growing up in the affluent Oakland hills will live, on average, 15 years longer than an African-American child growing up in the lower-income Oakland flats.[1] There are similar statistics from communities across the country. The magnitude of health inequities across the U.S. along lines of race, place, class, and other forms of oppression are perhaps describable, but in a sense, incomprehensible. While public health research can attempt to quantify the years of life lost as well as the years people live in poor health, the true human costs of a loved one facing heart disease, hypertension, homelessness, suicide, or multiple other health issues because they have lost their home, are immeasurable. The impacts of losing one's home, and any accumulated wealth, can mean parents missing dinner with their children because of longer commutes; hopes for a college education decimated as well as the potential to realize the "American Dream;" families doubling or tripling up on housing, or trying to stay together while becoming homeless; and communities that once helped each other now being displaced and disconnected.

As interviewees described, ACPHD has an ambitious vision, but it makes the abstract idea of health equity concrete and provides staff with both a foundation and a goal to addressing these challenging, and potentially overwhelming issues. Interviewees were able to quote the vision from memory, stating that "everyone, no matter who you are, where you live, how much money you make, or the color of your skin, can lead a healthy, fulfilling, and productive life" and were able to describe how they were turning this vision into action.[1] Interviewees also noted numerous challenges in actualizing this vision—these are areas ripe for research and support. While ACPHD's work on foreclosure is only a small piece of the health equity puzzle, if a larger number of the 2,800 LHDs across the country engaged in similar work across all SDH, the results could tremendously shift health outcomes in the U.S. The field of public health is adept at describing health inequities; it is more challenging to find resources that articulate what health equity is and what our society would look like if we achieved this goal. What is clear from this data is that there is a subset of LHDs already engaged in work directed at defining health equity and making it a reality. And there are more LHDs that are poised to act.

Clearly, this research is just one small piece of a much needed comprehensive national research and practice strategy that seeks to not just maintain the status quo of public health, but to eradicate the deep inequities our country faces and the social cleavages they spring from. As stated in the introduction, public health is "...what we, as a society, do collectively to assure the conditions for people to be healthy."[2] LHDs are only one part of our society, and therefore only one actor in creating conditions that allow everyone to have the opportunity to be healthy. However, they are a critical piece. While further research is necessary, this research project lays out both recommendations for research and some concrete steps LHDs, and the organizations that support them, can take. Because of the unique role LHDs play amongst government agencies and because they are present in communities across the county, with support, they can be central figures in a movement for health equity across the country.

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