**AN EMERGING APPROACH TO HEALTH EQUITY PRACTICE:
EXPLORING THE IMPLEMENTATION OF
ORGANIZATIONAL HEALTH EQUITY CAPACITY ASSESSMENTS**

by
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ABSTRACT

Objective: Public health organizations play a key role in achieving health equity, but there are significant gaps in the literature related to the assessment of organizations' health equity capacity. The purpose of this dissertation research was to strengthen the evidence base related to organizational health equity capacity assessments (OCAs). This research benefits health departments by providing strengthened evidence related to OCA selection and implementation, helping departments to better assess their organizational capacity to design, implement, fund, manage, evaluate, and sustain health equity-oriented work.

Methods: This dissertation contains three manuscripts. The first manuscript is a scoping review characterizing the OCAs in the gray and peer-reviewed literature, providing a baseline for researchers and practitioners to find and utilize the OCA that best meets their needs. The second manuscript explores the factors that facilitate or inhibit OCA implementation, and documents the initial organizational impacts of these assessments, through two case studies conducted with the Kitsap Public Health District (KPHD) and the Rhode Island Department of Health (RIDOH). The third manuscript is a white paper exploring the programmatic opportunities for OCA implementation and recommends further research.

Results: The scoping review identified and characterized 17 OCAs that met the inclusion criteria at the time of research. All identified OCAs assess organizational health equity readiness and/or capacity, but differ regarding thematic focus, structure, and intended audience. Implementation evidence is limited. The case study expanded

this evidence base, providing implementation evidence drawn from the two health department OCAs that will be useful to other departments interested in assessing their capacity. Considerations for future OCA implementation are highlighted in the results. The white paper highlighted additional research needs to strengthen OCA impact and identified potential programmatic uses of OCAs including to strengthen equitable public health emergency preparedness, develop equity-oriented public health capabilities through accreditation, and facilitate multi-sectoral, collaborative progress towards improved health equity action.

Conclusion: This dissertation advances the evidence base related to organizational health equity capacity assessments and identifies opportunities for OCA utilization and further research. Organizational health equity capacity is a unique type of capacity and should be an ongoing focal area for all health departments.

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CHAPTER 1: INTRODUCTION

Background and Literature Review

"In short, a central question from a social justice perspective is, 'Why is there inequality and how can our organizational structure, policies, and practices change to eliminate health inequities?'"
- NACCHO's Tackling Health Inequities through Public Health Practice: A Handbook for Action.[1]

A health disparity can be defined as "a chain of events signified by a difference in environment, access to/utilization of/quality of care, health status, or a particular health outcome that deserves scrutiny."[2] Health inequities are *systematic* disparities in health or determinants of health between groups with different levels of social power, including different sub-populations defined by social, demographic, geographic, or other characteristics.[3] Inequitable health outcomes are those that are unnecessary, avoidable, unfair, and unjust.[4]

Health equity has been a long-standing and increasing priority within the United States and globally. In the United States, the Healthy People initiative, renewed every decade since 1980 by the U.S. Department of Health and Human Services (HHS), guides national health promotion and disease prevention efforts countrywide. The initiative's perspective on health equity was first articulated in Healthy People 2000, which sought to reduce health disparities. The most recent iteration, Healthy People 2030 (released in 2020), envisions "a society in which all people can achieve their full potential for health and well-being across the lifespan," which requires "requires eliminating health disparities, achieving health equity, and attaining health literacy."[5] This objective to achieve health equity reflects a critical shift away from simply

identifying disparities and towards understanding underlying root causes and developing multidisciplinary, community-driven population-level solutions.[6]

Healthy People 2030's equity orientation was prescient: the COVID-19 pandemic has clearly revealed the deep-seated nature of health inequities and their underlying determinants. Across the world, existing health inequities were exacerbated by the pandemic, reinforced by economic, social, political and structural determinants.[7] In the United States, an expanding body of research continues to demonstrate the "longstanding inequities that have systematically undermined the physical, social, economic, and emotional health of racial and ethnic minority populations and other population groups that are bearing a disproportionate burden of COVID-19."[8] For example, a systematic analysis across seven states found that African Americans were disproportionally more likely to be infected by COVID-19 and to die of COVID-19.[9] The analysis also identified other determinants of health such as socioeconomic status: counties with higher COVID-19 death rates were associated with lower median incomes and higher poverty levels, across all races;[9] these findings align with the long-standing recognition of the impact of resource inequality on health outcomes.[10]

To effectively advance health equity, all organizations that comprise the health system must have the capacity to do so. Health equity must be explicitly incorporated, prioritized, and resourced within organizations at all levels of the health system, including both health care and public health organizations.[11] Organizations are one level of the complex ecosystem influencing disparities.[12] Public health organizations are critical in achieving health equity.[13]

One paper that sought to define organizational capacity for public health services and systems research conceptualized organizational capacity "as a predictor of process and performance and resultant health outcomes".[14] Key constructs of organizational capacity for public health were found in one review to commonly include fiscal and economic resources, workforce and human resources, physical infrastructure, interorganizational relationships, data and informational resources, system boundaries and size, governance and decision-making structures, and organizational culture.[14] Other research describes these constructs or "internal-facing capacity strategies" in different terms, but there are many consistencies across them, including organizational culture, readiness for change, policy development and program planning processes, organizational infrastructure, staff training, and others.[15,16]

The concept of assessing the health equity capacity of public health organizations is not a new one. In the United States, organizational capacity has been a theme of health equity resources for years, including in NACCHO's Tackling Health Inequities Through Public Health Practice: A Handbook for Action.[1] NACCHO's Guidelines for Achieving Health Equity in Public Health Practice[17] called for internal organizational assessments of local health departments' capacities to address health inequities, and organizational health equity competence is a part of the foundational capabilities described by the Public Health National Center for Innovations.[18] Organizational health equity capacity is a similarly recognized but nascent concept internationally. A conceptual framework of organizational capacity for public health equity action was developed based on experiences in the Canadian public health sector.[19] The European Union-wide collaborative DETERMINE, 2007-2010, with

participants from 26 countries, jointly identified capacity building needs to address health inequities. Organizational development was one of six priority areas identified.[20]

There are, however, significant gaps in the peer-reviewed literature related to the assessment of organizational health equity capacity. Health equity research to date has frequently focused on key aspects such as better understanding the pathways to equity in health[21,22] and developing causal or explanatory models of inequities;[23] improving measurement and monitoring of disparities;[24] developing health equity-oriented policy approaches;[25] and designing more effective, multi-level interventions to reduce inequities.[26,27] There has been very little research conducted on how to assess and strengthen the health equity capacity of public health organizations. Even extant frameworks that ostensibly provide models for organizations working to improve disparities often do not address inner context, with little attention paid to organizational measures and little guidance for implementing organizational change, instead focusing on external context and characteristics and patient/population outcomes.[28] As a result, organizational health equity capacity assessment tools (OCAs) – those assessments that effectively enable public health organizations to evaluate their internal capacity for health equity action – can be challenging to locate, select, and implement.

Significance

This dissertation advances the state of the evidence related to how to assess, improve, and monitor organizational capacity for health equity action. Because there is no commonly-accepted set of competencies or constructs that constitute the core

components of organizational health equity capacity, one value-add of this research is the identification and synthesis of the common components of organizational health equity capacity found in OCAs. Prior to this research, practitioners had to conduct individual searches to identify and compare available OCAs. No systematic review had collated and synthesized information about existing OCAs, hindering uptake. Furthermore, the relevant implementation research is sparse. Neither OCA implementation nor OCA results have been well-documented. Few studies describe how OCAs are utilized, and few explore the impacts of these assessments on either the organizations conducting them or the populations they serve. These gaps have significant implications for equity-oriented public health practice as public health practitioners and organizations increasingly seek to improve their efforts to reduce health inequities.

The purpose of this dissertation research is to strengthen the evidence base related to organizational health equity capacity assessments. This research benefits state, county, tribal, and local health departments by providing strengthened and timely evidence related to OCA selection and implementation, helping departments to better assess their organizational capacity to design, implement and/or fund, manage, evaluate, and sustain health equity-oriented work.

Research Aims

This research has three specific aims, which are illustrated in the conceptual framework below:

- Aim 1: Synthesize existing peer-reviewed and gray literature related to organizational health equity capacity assessments.

- Aim 2: Understand the experience of implementing organizational health equity capacity assessments.

- Aim 3: Understand the initial impact of implementing organizational health equity capacity assessments.

Conceptual Framework

Figure 1: Conceptual Framework
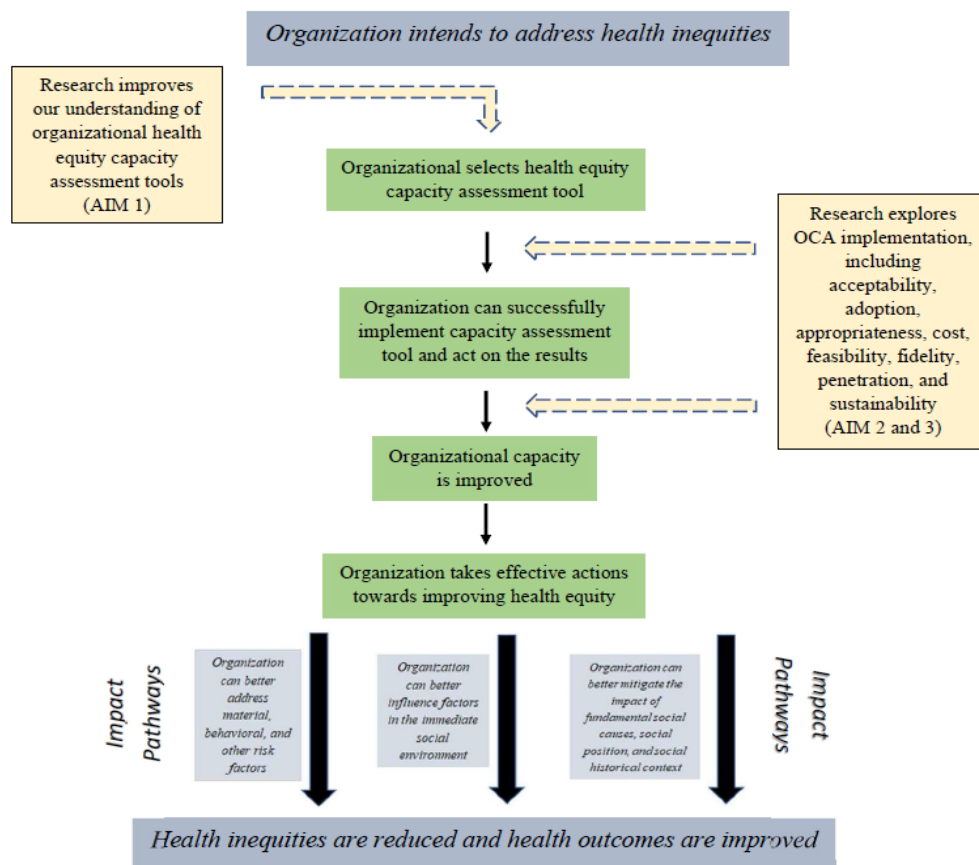
Original content by Marcus, R (2021) with reference to: Proctor et al., 2011; NAACHO, 2006; Spitzer-Shohat, 2019; Alonge & Peters, 2015; Diderichsen et al, 2001; and Phelan et al, 2010.

The key gaps filled by this research are illustrated above in Figure 1, which presents a framework that conceptualizes the role of the organizational health equity capacity assessment within the broader context of health equity and the social determinants of health.

The model is built upon existing papers and frameworks, including the health-equity oriented organizational change strategies assessed by Spitzer-Shohat and Chin,[28] the health inequality models described by Alonge and Peters,[24] Diderichsen et al.'s articulation of the social disparities of health,[21] Phelan et al.'s work on social conditions as fundamental causes of health inequalities,[29] the examples included in NACCHO's Handbook for Action,[1] and Proctor et al.'s articulation of implementation research outcomes.[30] In Figure 1, the pathways illustrate the mechanisms through which a public health organization can contribute to reduced inequities, connecting 1) an explicit organizational goal or intention related to health equity to 2) selection and implementation of an OCA to assess organizational health equity capacity and improve capacity if needed, and then to 3) concrete organizational actions towards improving health equity as a result of that improved capacity. These actions are intended to contribute to 4) the potential eventual reduction in health inequities and improvement in health outcomes, as seen by the black arrows that connect equity-oriented interventions or programs to desired long-term health equity outcomes. These arrows highlight the various mechanisms through which a state, county or local health department can contribute to reducing inequities, including by addressing biological, behavioral, materialist, and psychosocial risk factors,[24] and/or more fundamental social determinants[23] such as the impact of social position and of social and historical

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context.[21] This dissertation research centers on the components in yellow – the OCA components that expand our understanding of the pathway between an organization's health equity intention and its health equity-focused implementation.

Dissertation Organization

The dissertation is organized in manuscript format. The aims described in the conceptual model align with the three manuscripts that form the primary components of this dissertation. The first manuscript is a scoping review (Aim 1). This scoping review aims to characterize the OCAs in the gray and peer-reviewed literature, providing a baseline for researchers and practitioners to find and utilize the OCA that best meets their needs. The second manuscript describes the comparative findings from two case studies on OCA implementation, conducted in 2022-2023 with the Kitsap Public Health District (KPHD) in Bremerton, WA, and the Division of Community Health and Equity (DCHE) in the Rhode Island State Department of Health (RIDOH) (Aim 2). This paper utilizes Proctor et al.'s implementation outcomes framework[30] to explore the factors that facilitate or inhibit the successful implementation of organizational capacity assessments, answering these two related research questions: *What factors facilitate or hinder the implementation of organizational health equity capacity assessments?* and *What are the initial organizational impacts of undergoing an organizational health equity capacity assessment?* The third manuscript is a white paper that explores the programmatic implications of OCA implementation research (Aim 3). This white paper identifies opportunities for future OCA implementation and research, and advocates for

the importance of organizational health equity capacity as a unique capacity area for health departments.

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CHAPTER 2: MANUSCRIPT 1 – SCOPING REVIEW

This chapter reflects the paper published as a result of this research, with minor edits as needed to align with the overall dissertation structure.

Abstract

Objective: To conduct a scoping review to identify and characterize existing organizational health equity capacity assessments (OCAs). OCAs provide a valuable starting point to understand and strengthen an organization's health equity readiness and capacity. We could find no previous efforts to characterize extant OCAs.

Methods: We searched the PubMed, Embase, and Cochrane databases and practitioner websites to identify peer-reviewed and gray literature papers and tools that measure or assess health equity-related capacity in public health organizations. 17 OCAs met the inclusion criteria. Primary OCA characteristics and implementation evidence were organized and described thematically according to key categories.

Results: All identified OCAs assess organizational health equity readiness and/or capacity, with many aiming to guide health equity capacity development. The OCAs differ regarding thematic focus, structure, and intended audience. Implementation evidence is limited.

Conclusions: By providing a synthesis of OCAs, these findings can assist public health organizations in selecting and implementing OCAs to assess, strengthen, and monitor

their internal organizational health equity capacity. This synthesis also fills a knowledge gap for those who may be considering developing similar tools in the future.

Introduction

States, counties, cities, and towns across the United States are increasingly identifying racism as a public health crisis, often declaring their corresponding intent to promote "equity for all" approaches in their public health policies and programs.[1] Health inequities are systematic health disparities between groups with different levels of social power;[2] differences in health outcomes are inequitable when they are unnecessary, avoidable, unfair, and unjust.[3] The COVID-19 pandemic has highlighted the "longstanding inequities that have systematically undermined the physical, social, economic, and emotional health of racial and ethnic minority populations and other population groups that are bearing a disproportionate burden of COVID-19".[4] In addition to race and ethnicity, demographic factors such as gender, sexual identity and orientation, geographic location, disability, and others factors also influence health inequities in the United States.[5] Public health organizations play a key role in achieving health equity.[6,7] Public health equity work must be explicitly incorporated, prioritized, and resourced. Building the health equity capacity of public health departments can improve their ability to develop, implement, and sustain equity-centered work.[8]

The Public Health National Center for Innovation (PHNCI) defines health equity organizational competence as the "ability to strategically coordinate health equity programming through a high level, strategic vision and/or subject matter expertise which

can lead and act as a resource to support such work across the department".[9] Internal-facing capacity strategies, on topics such as organizational culture, readiness for change, policy development and program planning processes, organizational infrastructure, staff training, and others[10,11] are central to transforming health-equity-oriented public health practice.[12] Previous articles have identified the need to focus on organizational factors in public health and health care organizations to reduce disparities,[13] yet most inequity reduction frameworks lack guidelines on internal organizational assessments, and do not "provide guidance on translation of equity across multiple organizational departments and levels".[14] Organizational health equity capacity assessment tools (OCAs) are increasingly utilized by public health organizations to assess and improve their organizations' capacities to improve equity.[15,16] These assessments can serve as the foundation for organizational capacity for health equity action. Currently, however, OCAs can be challenging to locate, have varied structure and content, and have limited implementation evidence. These issues can hinder OCA uptake.

OCAs can be particularly useful for state health departments (SHDs), county health departments (CHDs), and local health departments (LHDs). A scan of government public health capacity recommended that health departments develop internal infrastructure to advance equity,[17] and equity is now one of the eight Foundational Capabilities described in the Foundational Public Health Services Framework.[18] LHDs, for example, are well-positioned to address health equity disparities locally,[19] but must have "an understanding of health equity, have the means to realize facilitators of health equity work, and recognize the complex context in which

health equity work exists".[20] The OCA implementation process provides a foundation for understanding current equity capacity and where there is room for growth. In a 2019 survey[21] evaluating the Health Equity Guide,[22] a platform that provides strategic practices and case studies to help health departments advance health equity, 86% (54 of 63) of SHD respondents and 73% (161 of 220) of respondents from LHDs reported that they were working to build organizational capacity to advance health equity, and that guidance on which practices to consider or which organizational assessment to utilize would be useful. In the Public Health Accreditation Board (PHAB)'s Standards and Measures Version 2022, health equity is emphasized across every domain.[23] OCAs have the potential to help organizations progress and monitor change along the four stages of transformation described by the PHAB toward committed equity-centered work – moving from the status quo to committed, active equity-centered work.[24]

This scoping review responds to the research question "How can we characterize existing organizational health equity capacity assessment tools for public health organizations?" We were unable to identify any systematic reviews that answer this question by collating and synthesizing information about extant OCAs. Practitioners must conduct individual searches to identify and compare available OCAs. This scoping review synthesizes and characterizes the OCAs in the gray and peer-reviewed literature, providing a baseline for researchers and practitioners searching for and selecting among the tools that have been developed to assess or review organizational health equity capacity. This scoping review can serve as a precursor to a future systematic review on this topic.

Objective

We conducted a scoping review to identify and characterize existing OCAs. Scoping reviews provide overview of the evidence related to a particular concept – in this case, an overview of existing organizational health equity capacity assessment tools to explore commonalities or key characteristics among these assessments.[25] We conducted a search among the peer-reviewed and gray literature to identify as many OCAs as possible, with the objective of understanding similarities, differences, and key characteristics of each.

Methods

Our methods were based on the six-stage standard scoping study framework proposed by Arksey and O'Malley, which included identifying the research question and relevant studies, selecting studies, charting the data, collating and summarizing the results, and validating the findings with practitioners.[26]

Eligibility criteria

Inclusion criteria included OCAs published in peer-reviewed or gray literature, in the English language, with no restrictions on geographical origin or publication year. Articles, reports, and tools had to measure or assess the development of the health

equity-related capacity of any public health organization. Organizational health equity capacity could be described using terms including *health inequities*, *inequalities*, and/or *disparities*. We did not restrict the structure of the OCAs.

We excluded sources if they did not address organizational-level capacity related to health equity or did not include any measurement or assessment of such capacity. We excluded 147 articles for not meeting multiple inclusion criteria; for example, per Figure 1, we excluded some articles for not focusing on capacity building and for not including relevant assessment tools or approaches. It was not sufficient to describe other aspects of health equity work (the measurement of inequities, or the implementation of equity-oriented policies, programs, etc.) without an approach to assessing health equity capacity building at the organizational level.

Information sources

The search was conducted in PubMed, Embase, and Cochrane databases. Following a strategy of snowball and purposive sampling,[26] practitioner literature was identified via the following practitioner websites and resources: the Health Equity Guide, the National Association of County and City Health Officials (NACCHO) Toolbox, the Racial Equity Tools website, Government Alliance on Race and Equity Toolkit, the MN DOH Health Equity Resources list, and the Bay Area Equity Atlas. Key reference lists were hand-searched.

Search strategy

A three-step search strategy was developed and utilized to be as comprehensive as possible within the constraints of time and resources.[27] A search in PubMed and Embase used preliminary limited keywords to elicit potentially relevant papers. The titles, abstracts, and keywords of these initial papers were reviewed to develop a more comprehensive list of keywords. Search terms were also compiled with the help of stakeholders at the NACCHO and Human Impact Partners (HIP). We engaged with NACCHO and HIP regarding the search terms because we had previously connected with them while conceptualizing this project because of our knowledge of their ongoing work and expertise in the development of organizational health equity capacity. A second search using all identified keywords and corresponding MeSH and Emtree terms was then undertaken across the following databases: PubMed (on December 30, 2021), Embase (on January 15, 2022), and Cochrane (on January 15, 2022). As a quality control measure, we confirmed that pre-identified relevant preliminary citations were indeed identified through the full searches. A sample search string for PubMed is in Appendix 1. After selecting sources for inclusion, we examined these reference lists to identify additional potential sources.

To identify relevant OCAs in the gray literature, we searched the well-known organizations' websites and common databases described above. We applied the same inclusion/exclusion criteria. We recognized that we had reached saturation when citation searching and reviews of practitioner resources consistently referenced the same

OCAs. We de-duplicated results across the peer and gray literature databases. Once final inclusion decisions were made, we searched again for each tool by name to capture available implementation examples. We also contacted the owner of every tool by email to request additional information regarding where and how included OCAs have been implemented. Most owners did not respond; those that replied did not track information beyond what is available publicly. One organization indicated anecdotal awareness of some uses but did not share further information.

Selection of sources of evidence

For the published literature, the first round of source selection was based on title and abstract examination and the second round was a full-text review. Selection was performed based on the above inclusion/exclusion criteria. One author (R.M.) reviewed all papers at both stages. A second author (N.M.N.) reviewed a sub-set of papers at the full-text stage to reach consensus on those papers which were ultimately extracted. Both authors reviewed all papers that were included in the final review. For the gray literature, 1 author (R.M.) conducted the initial search and screening; R.M. and N.M.N. reviewed the findings to reach consensus on which sources to include. For both gray and published literature, a third author (K.M.P.P.) provided oversight of the process and reviewed a sub-set of full-text papers and tools to ensure consensus across all authors. Final papers from the peer-reviewed literature were de-duplicated in EndNote and uploaded into COVIDENCE for extraction. Data from the gray literature were extracted into an Excel spreadsheet with the same categories as the COVIDENCE template.

Data charting process and data items

The analysis phase of the scoping review involved "charting" in Excel to sort through and synthesize qualitative material according to key issues and themes and to capture a set of predefined characteristics of the identified OCAs. One author (R.M.) conducted the data extraction and a second author (N.M.N.) reviewed the data to reach consensus on extraction. For each OCA, we captured: aims, structure or methods, themes, intended audience (if any), and health equity capacity definition if included. We received feedback from HIP and NACCHO on which aspects would be most useful for the case studies. Where possible, we documented suggestions for implementation, such as resources required, or examples of implementation (geographic location, population served, capacity findings/results, and/or other implementation information). Aligned with long-standing guidance for scoping reviews,[26] [28] quality of the assessments and tools was not considered.

Synthesis of results

The findings were organized and described thematically according to the previously described categories (i.e., aim, structure or methods, themes, audience, and definitions). The analysis and presentation of findings align with the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) for scoping reviews.[29]

Narrative findings, including key commonalities and differences among OCAs, are presented in Tables 1 and 2.

Results

Selection of sources of evidence

The PRISMA flow diagram below (Figure 1) details the numbers of sources of evidence screened, assessed for eligibility, and included in the review, with reasons for exclusions at the full-text stage.

Figure 1: PRISMA flow diagram

Identification of studies via databases and registers		Identification of studies via other methods	
Identification			
Records identified from*: Databases (n = 2813) *EMBASE: 2348* *PubMed: 441* *Cochrane: 24*	Records removed *before screening*: Duplicate records removed (n = 126)	Records identified from: Websites (n = 42) Citation searching and unpublished collections (n = 43)	
Screening			
Records screened (n = 2687)	Records excluded (n = 2297)	Records screened (n = 85)	Records excluded (n = 69)
Reports sought for retrieval (n = 390)	Reports unable to retrieve (n = 13)	Reports sought for retrieval (n = 16)	Reports not retrieved (n = 1)
Reports assessed for eligibility (n = 377)	Reports excluded: 369 No capacity-building focus (n = 127) No capacity at organizational level (n = 31) No assessment (n = 39) No health equity focus (n = 25) Multiple criteria not met (n = 147)	Reports assessed for eligibility (n = 15)	Reports excluded: No capacity building focus (n = 2) No health equity focus (n = 3) No measurement/assessment (n = 1).
Included			
Studies included in review (n = 17) (n=8 from published studies) (n = 9 from gray literature)			

Characteristics of sources of evidence

We found consistency across major themes. All of the OCAs assess equity-oriented internal capacities, such as institutional leadership and governance, policies and guidelines, budget alignment and resource allocation, commitment and shared visions, internal structures, use of data, staff training/support, and/or staff diversity. However, each OCA differs in which themes are included and how they are described (Appendix 2 - Table 1). The level of detail ranges from three to nine overarching domains per tool. Most, but not all, include measures or indicators aligned with each domain or sub-domain. Some OCAs distinguish between individual staff competencies and organizational competencies, whereas others assess staff competencies holistically as part of the organization's workforce measurement. Some OCAs included measures related to external-facing capacity, such as the strength of collaboration with community partners, noting that external and internal capacity can be intertwined, and that evaluating the internal capacity component requires awareness of the external enabling environment.[30] An organization exploring OCA implementation must review OCA content in detail to ensure the focal areas and approach will align with organizational needs.

The identified OCAs ranged widely in publication dates (from 2006 to 2020), in place of origin, and in intended audience. We identified implementation case examples or published studies (Appendix 2 - Table 2) in the following geographic locations: Maricopa County, Arizona; Prince George's County and Baltimore City, Maryland;

Ingham County, Michigan; Hennepin County (Minneapolis) and Rice County, Minnesota; Missouri; North Carolina; Multnomah County, Oregon; Harris County, Texas; Kenosha County, Wisconsin; the Veterans Integrated Service Networks in the U.S. Western Region; Ontario, Canada; and local and regional health units in 7 Canadian provinces. Six OCAs were intended for any public health organization.[30-35] Three were intended for LHDs[36-38]; three for any type of public health department but with implementation information only at the county level[39-41]; one for state health departments[42]; two for faith-based organizations, specifically churches[43,44]; one for VA service networks[45]; and one for public health coalitions.[46] Charted data for each included source of evidence is available (Appendix 3).

Discussion

We found little consistency regarding how organizational health equity capacity is defined or assessed. As public health organizations seek to strengthen efforts to reduce health inequities, we sought to fill a key gap in the literature by identifying and characterizing the tools that have been developed to assess or review organizational health equity capacity. We could find no previous efforts to characterize extant OCAs. The 17 OCAs ultimately included can help public health organizations improve their capacity to develop, implement, and sustain equity-focused work. The OCAs all described a similar purpose, with common aims of assessing organizational health equity readiness and/or organizational health equity capacity. Most aim to provide

considerations or strategies to increase organizational health equity capacity or readiness, and can be utilized repeatedly to monitor progress.

Many OCAs lack specific definitions of organizational health equity capacity. Where specified, organizational health equity capacity is variably defined to include equity-oriented organizational characteristics, practices, programs, and policies; key competencies; and foundational practices. Some tools do not include definitions, making it more challenging for potential OCA implementers to quickly assess whether the approach to organizational health equity capacity in a given tool is appropriate for their organization.

We found that OCAs published in the peer-reviewed literature were more challenging to find than OCAs published in the gray or practitioner literature, because they were not commonly linked on practice-oriented websites, and were found only through a targeted search in Embase or PubMed. However, these peer-reviewed OCAs often included useful data on capacity findings or results. For example, the Health Equity and Social Justice Dialogue-Based Assessment Tool summarized results to provide an overview, strengths, gaps, and action items.[32] The LHD Implementation Climate and Capacity questionnaire, when implemented with 115 LHD practitioners in Missouri, identified barriers to health equity capacity development including conflicting organizational priorities, a lack of external support for health equity work, and the importance of additional training in several areas.[37]

Some, but not all, of the peer-reviewed tools included implementation information, e.g., barriers to and/or facilitators of OCA implementation. Cohen et al. field-tested indicators to assess and guide the health equity work of public health

agencies among four local public health agencies (a mix of urban and rural) in Ontario.[38] This pilot illuminated barriers to using the indicators including poor data quality, time requirements, and human resource requirements; and facilitators including strong leadership, community relationships, and existing strategic plans that addresses health equity. The authors of the Three-Dimensional Framework to Advance Coalition Health Equity Capacity noted that qualitative research and thematic coding capacity is needed for implementation.[46] The FBI-CI framework was implemented with church congregations in Prince George's County and Baltimore City, Maryland; it was envisioned as a self-assessment but participants had difficulties responding, so an interview format is recommended instead.[43] In general, we found minimal descriptions of resources required.

It is worth noting that many LHDs – including but not limited to Harris County, Texas, Maricopa County, Arizona, Hennepin County, Minnesota, and Rice County, Minnesota – have adapted BARHII's Local Health Department Organizational Self-Assessment Toolkit for their own use.[47] (Rice County also incorporated the Race Matters Organizational Assessment.[31]) These LHDs reported the utility of conducting these self-assessments, but without much documentation of their implementation process or results. The original BARHII Toolkit includes a section on planning for implementation, describing the leadership, communication, staff capacity, and resource requirements that can help enable successful implementation of the Toolkit.

We could not identify capacity assessment results nor implementation information for the following OCAs: the Health Department Self-Assessment Questions,[48] the Equity and Empowerment Lens,[41] the Protocol for Culturally

Responsive Organizations,[34] the Learning and Action Tool for Public Health Organizations,[42] the CDC's "Building Organizational Capacity to Advance Health Equity" self-assessment module,[33] and the Organizational Health Equity Checklist.[35]

This research did not find sufficient evidence to explore the types of domains or measures most useful, or most widely used, in different contexts. For example, a separate study identified the internal organizational health equity capacity factors - leadership, institutional commitment, trust, credibility, and inter-organizational networks - that are likely important in the context of serving urban African American neighborhoods.[49] Findings like these could influence OCA selection. Contextual information should be included in OCA publications if possible.

We intentionally did not restrict the type of OCA structures or formats that we included in the review, because we aimed to describe the full breadth of OCAs available. We found OCA structures ranging from a qualitative framework to individual surveys and reflections to a full toolkit with multiple components. Regardless of where an organization is in its health equity journey, there is likely an OCA that is well-suited. On the other hand, it was challenging to locate some OCAs, in part because the language used to describe this work varies widely. The most commonly used title was "assessment," but OCAs were also described as a tool, a protocol, a conceptual framework, an instrument, a questionnaire, or an inventory. Using consistent language would enable OCAs to be more easily found, compared, selected, and utilized.

Our scoping review had some limitations. First, publication bias is inherent in the peer-reviewed databases, which we hope was minimized by searching the gray literature. We searched as extensively as possible for gray-literature papers, reports,

and case studies available online, but may have missed some examples, including but not limited to those in languages other than English or those found only in additional databases. Finally, the field of health equity practice is changing rapidly, and our results are only current through March 2022.

Conclusion

Our review aims to bring the role of OCAs to the forefront of equity-oriented public health practice. OCAs provide a valuable starting point to understand an organization's health equity readiness and capacity; these assessments provide foundations for committed equity-centered work. Our characterizations of the identified OCAs are intended to assist public health organizations in selecting an OCA to usefully assess, guide, and/or monitor their internal organizational health equity capacity. This review also provides a useful summary of the state of the art for anyone considering developing similar tools or frameworks in the future. We recommend that future publications and case studies include data related to OCA implementation, including capacity findings, implementation lessons learned, and resources required, where possible. This information is necessary to inform OCA uptake and implementation.

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Appendices

Appendix 1: Final PubMed Search String (as of 12/30/2021):

(("Health equity"[mesh] OR "Healthcare Disparities"[mesh] OR "health equity"[tw] OR "health inequit*"[tw] OR "Healthcare Disparit*"[tw] OR "Health care Disparit*"[tw] OR "health equal*"[tw] OR "healthcare equal*"[tw] OR "health inequal*"[tw] OR "healthcare inequal*"[tw] OR "vulnerable populations"[mesh] OR "Social Determinants of Health"[mesh] OR "health status disparities"[tw] OR "health status disparities"[mesh] OR "racial equity"[tw] OR "social justice"[tw])) AND ("organizational culture"[mesh] OR "organizational culture"[tw] OR "organizational innovation"[mesh] OR "organizational innovation"[tw] OR "organizational objectives"[mesh] OR "organizational objectives"[tw] OR "organizational culture"[tw] OR "organizational change"[tw] OR "organizational capacity"[tw] OR "capacity building"[mesh] OR "capacity building"[tw] OR "Decision Making, Organizational"[mesh]) AND ("public health systems research"[mesh] OR "public health systems research"[tw] OR "Public Health Administration"[mesh] OR "public health practice"[mesh] OR "Public Health Administration"[tw] OR "public health practice"[tw] OR "health services research"[mesh] OR "health services research"[tw] OR "organizational case studies"[mesh] OR "organizational case studies"[tw])

Appendix 2: Tables

Table 1. *Common characteristics of OCAs for public health organizations as identified through a scoping review, January–February 2022*

First author (year)	Article title	OCA aim and audience, if specified	Definition of health equity capacity	Structure	Themes
Annie E. Casey Foundation (2006)[30]	Race Matters: Organizational Self-Assessment	Aim: assess an organization through a racial lens, offer next steps for equity action plans, and help track organizational change. Audience: any organization	Not included	An organizational self-assessment tool that includes a series of questions with a set of possible responses that total to a racial equity score	Domains: staff competencies, organizational operations. Staff themes (not comprehensive): staff knowledge, understanding, cultural competency, and ability to disaggregate data to conduct racial equity analyses. Organizational themes: barriers to opportunity; explicit equity goals, aligned resource allocations, and investments; deliberate plan to center and promote staff of color and foster multicultural environment; internal team to guide this work; regular internal trainings and assessments; and mechanism to address complaints
Balajee (2012)[31]	Equity and Empowerment Lens: First Version	Aim: help an organization assess programs or policies for equity impacts and implement an action plan to improve equity; help assess organizational level of readiness to implement the equity and empowerment lens and identify strategies that would increase the level of readiness. Audience: public health departments	To serve the immediate needs of communities while striving toward collective empowerment and equity	Within the equity and empowerment lens, the "organizational readiness reflection" uses pieces of the BARHII's toolkit and creates a reflection where respondents score the organization on characteristics and competencies	Themes: institutional commitment; hiring diverse employees; structure to support community partnerships; institutional support for staff and innovation; transparent and inclusive, responsive communication; creative use of funding; community-accessible data and planning; and streamlined administration processes. Competencies: knowledge of the right areas, knowledge of SDH, community knowledge and organizing skills, leadership skills, problem-solving skills, cultural responsiveness, and humility
BARHII (2010)[32]	Local Health Department Organizational Self-Assessment for Addressing Health Inequities: Toolkit and Guide to Implementation	Aim: serve as baseline measure of capacity, skills, and areas for improvement; guide strategic planning processes; serve as an ongoing tool to assess progress. Audience: LHDs	Not included	Self-assessment toolkit with templates for a staff survey, collaborating partner survey, staff focus groups, management of staff interviews, internal document review guidelines, and implementation guide	The whole toolkit covers the following: health department planning and policies; collaboration within the LHD; collaboration with external partners and policy makers; collaboration with community groups; and supporting staff to address the environmental, social, and economic conditions that impact health. Topics within the staff survey instrument include health department planning and policies, program planning, internal collaboration, collaboration with external partners and policy makers, working with communities, and offering support to staff. Domains related to organizational characteristics in the survey: institutional commitment, hiring practices, community partnerships, support to staff, communication, support for innovation, data and planning, and administrative process.
Bloss et al (2018)[33]	Health Equity and Social Justice in Public Health—A Dialogue-Based Assessment Tool	Aim: help take stock of an organization's readiness and capacity to address health equity and social justice. Audience: any health organization	Readiness and capacity to address health equity and social justice. Health equity is defined as "a fair and just opportunity to be healthier"[2]	Assessment matrix with discussion topics across domains	Four domains: leadership, workforce, community, and systems change
Centers for Disease Control and Prevention (2013)[34]	A Practitioner's Guide for Advancing Health Equity: Community Strategies for Preventing Chronic Disease. Chapter: Building Organizational Capacity to Advance Health Equity	Aim: offer ideas on how to maximize the effects of several policy, systems, and environmental improvement strategies with a goal to reduce health inequities and advance health equity. Audience: any health organization	Opportunities to "improve health for all"	Self-assessment questions and a case example	Organizational commitment, funding, workforce, operations, community partnerships, and next steps (in the questions for reflection)

Cohen et al (2013)[35]	A Conceptual Framework of Organizational Capacity for Public Health Equity Action	Aim: guide research, dialogue, reflection, and action on public health capacity development to achieve health equity goals Audience: any health organization	The capability of a public health organization to identify health inequities, mobilize resources, and take effective action to reduce inequities	Journal article with conceptual framework	Internal context domains: values, commitment and will, and organizational infrastructure
Cohen et al (2018)[36]	Indicators to Guide Health Equity Work in Local Public Health Agencies: A Locally Driven Collaborative Project in Ontario	Aim: guide health equity work in local public health agencies Audience: any health organization	To address the SDH to reduce health inequities across population groups	Set of indicators	Domains/themes: how the public health agency assesses and reports data; how the agency modifies/orients its programs and services; how it engages in community/multisectoral collaboration; whether policy and position statements reflect advocacy for priority populations; and areas in organization and system development (eg, whether a strategic plan is in place and has identified targets for desired equity outcomes)
Region V Collaborative Improvement and Innovation Network on Infant Mortality (2016)[37]	Foundational Practices for Health Equity: A Learning and Action Tool for State Health Departments	Aim: assist state public health organizations to evaluate and document current capabilities to advance health equity, track improvements, and transform practice Audience: state health departments	The public health organization's ability to translate theory into action and transform their practices to address SDH and advance health equity	Seven foundational practices, each of which has a list of questions for assessment	Expand the understanding of health; assess and influence the policy context; equity focus of leadership; data analysis and use; continuous health equity learning; support of successful partnerships and community capacity; and strategic use of resources and accountability
Curry-Stevens and Reyes (2014)[38]	Protocol for Culturally Responsive Organizations	Aim: determine their profile and identity along a continuum of degrees to which the organization is and is not culturally responsive Audience: all organizations addressing racial inequities; includes health as a focus area	Not included	Protocol and matrix, produces an organizational profile	Nine domains include commitment, governance, and leadership; racial equity policies and implementation practices; organizational climate, culture, and communications; service-based equity; service user voice and influence; workforce composition and quality; community collaboration; resource allocation and contracting practices; and data, metrics, and quality improvement
De Marco et al (2011)[39]	Assessing the Readiness of Black Churches to Engage in Health Disparities Research	Aim: evaluate church readiness to engage in health disparities research Audience: faith-based organizations engaging in health disparities research	Not included	Instrument with 2 one-page scenarios, each followed by 15 items to gauge readiness to conduct intervention and assessment activities; items measured on a Likert scale	For each scenario, themes in the instruments' questions included the following: staffing (who is responsible for this work? has leadership promoted health equity activities? do you have a lay advisor for this work?), budget (do you have a budget available?), policies (do you have relevant policies or goals for the congregation?), and guidelines (do you have guidelines?)
Hennepin County Public Health Department (2019)[40]	Public Health Department Health Equity Assessment	Aim: involve all staff to understand organization-wide picture of attitudes, practices, and competencies that indicate departmental capacity to address root causes of health inequities, and identify priority areas Audience: public health departments	Not included	Two tools—an initial survey and a follow-up survey—adapted from the BARHII toolkit	Themes: the public health department's commitment to SDH, the level of focus on health inequities, the incorporation of health inequities in strategic planning, the role of community partners, the role of the individual staff member, individual awareness of SDH and training on SDH, collaboration across the programs, leadership support and comfort in this space, collaboration with external partners, community capacity building, program orientation to community needs, and staff cultural diversity

Ingham County Health Department[41]	Health Equity Practice Evaluation	Aim: not available Audience: public health departments	Not included	A matrix with a series of 11 questions with a continuum of possible responses	Themes: support equity as a human right, leadership, multidisciplinary coordination, workforce development and education, working and collaborating with communities, communications strategy, health promotion, building alliances and coalitions, public policy development and analysis, advocacy, and monitoring and surveillance
Inzeo et al (2019)[42]	Advancing Coalition Health Equity Capacity Using a Three-Dimensional Framework	Aim: build and assess coalition health equity capacity Audience: coalitions	The degree to which organizations understand, have the skills, orient themselves toward, and implement strategies to advance health equity	Qualitative framework	Three dimensions of health equity capacity: conceptual foundations, collective action and impact, and civic orientation
Noe et al (2014)[43]	Providing Culturally Competent Services for American Indian and Alaska Native Veterans to Reduce Health Care Disparities	Aim: assess and determine organizational characteristics that predict the provision of culturally competent services for American Indian/Alaska Native veterans Audience: those serving veterans	Not included	Adapted version of the ORCA	ORCA high-level themes focus on need (staff need, program need), leadership (support, practices, performance measures, opinion leaders), resources (staffing, training, offices, equipment, general), and organizational climate (mission, change pressure, autonomy, cohesion, communication)
Stamatakis et al (2020)[44]	Development of a Measurement Tool to Assess Local Public Health Implementation Climate and Capacity for Equity-Oriented Practice: Application to Obesity Prevention in a Local Public Health System	Aim: develop a theory-based snapshot measurement tool that captures LHD organizational characteristics that align with implementation of equity-oriented practice and assess progress in building these structures and functions Audience: LHDs	Not included	An online questionnaire that draws from the Consolidated Framework for Implementation Research and the BARHII domains, as well as measurement items from the National Association of County and City Health Officials' roadmap for chronic disease prevention, to develop a measure of equity-oriented implementation climate and practice	Four domains of implementation climate: relative priority, tension for change, compatibility, and organizational incentives/rewards Four practice areas: assessment and planning, monitoring and analysis, leadership support, and obesity prevention practice
Tagai et al (2018)[45]	Assessing Capacity of Faith-Based Organizations for Health Promotion Activities	Aim: assess capacity for health promotion activities to improve the health of medically underserved communities and reduce health disparities Audience: faith-based organizations	Survey/assessment	A survey/assessment that is entitled the Faith-Based Organization Capacity Inventory	Across 3 categories: staffing and space (membership, building leadership, and staffing), health promotion experience (health ministry–specific activities), and external collaboration (collaborative partnerships, investment in research, and technical assistance)
University of Wisconsin Population Health Institute[46]	Organizational Health Equity Checklist	Aim: support organizational improvement in advancing health equity Audience: any health organization	Not included	A checklist based on the Association of State and Territorial Health Officials' Foundational Practices for Health Equity	The checklist aligns with the foundational practices. Question areas include understanding of health and health equity, organizational policy context, equity leadership within the organization, use of data, relevant workforce training and quality improvement, cross-sectoral and community partnerships and capacity building, and strategic use of resources.

Abbreviations: BARHII, Bay Area Regional Health Inequities Initiative; LHD, local health department; OCA, organizational health equity capacity assessment; ORCA, Organizational Readiness to Change Assessment; SDH, social determinants of health.

Table 2. OCA implementation information to inform use by public health organizations, as identified through a scoping review, January–February 2022

First author (year)	Article title	Location	Capacity findings/results	Resources required	Other implementation information
Annie E. Casey Foundation (2006)[30]	Race Matters: Organizational Self-Assessment	Rice County, Minnesota	Rice County Public Health staff "utilized the assessment to discuss how current policies and practices facilitated or hindered the advancement of health equity. The assessment process helped identify opportunities to advance health equity. One result was the development of a departmental health equity policy to guide for how the department advances health equity."	A state grant was available to support the internal assessment and other next steps. An external facilitator was used. Rice County Public Health collaborated with SDH staff to develop and tailor this assessment.	Individuals can complete the Race Matters tool, choosing their own unit of analysis—a whole organization or a unit within an organization. Rice County also used the BARHII in its adaptation.
Balajee (2012)[31]	Equity and Empowerment Lens: First Version	Multnomah County, Oregon	Not described	Self-assessment only	Considerations for implementation of the equity and empowerment lens as an individual or organization, including how to create space for the process. A team of key voices is recommended.
BARHII (2010)[32]	Local Health Department Organizational Self-Assessment for Addressing Health Inequities: Toolkit and Guide to Implementation	Harris County, Texas; Maricopa County, Arizona; Rice County, Minnesota; Hennepin County, Minnesota	Harris County: used a modified toolkit to assess staff willingness to embrace new concepts and health equity priority areas. Used the framework to develop a health equity framework to guide programming. Maricopa County: administered a subset of BARHII questions; 82% of agency staff (n = 496) participated in the survey. Responses provided a baseline assessment of staff perceptions of the agency's health equity focus (eg, the right amount, too much, not enough)	Appendix V includes estimates for time and materials budgeted for implementation, depending on the components selected for use. This analysis focuses on the staff survey to allow for comparability with other OCAs. The survey is the most resource intensive with leadership and staff time required to organize, manage, and take the survey, plus time to analyze the data (and potential for consultant).	Leadership must be engaged. The organization should have clarity about why this assessment is needed. The process requires sufficient staff capacity, someone who can facilitate the process (partner or consultant), and financial or technology resources available. Should clearly communicate to staff about how the results will be used, consider key timing, and communicate next steps. The ideal team makeup is also described.
Bloss et al (2018)[33]	Health Equity and Social Justice in Public Health—A Dialogue-Based Assessment Tool	Michigan	Summarized results provide an organizational overview, strengths, gaps, and action items.	Not described	The tool is meant to be completed through individual reflection, followed by group dialogue to discuss answers. Health administrators, staff, partners, and other relevant individuals and organizations should all complete the tool.
Centers for Disease Control and Prevention (2013)[34]	A Practitioner's Guide for Advancing Health Equity: Community Strategies for Preventing Chronic Disease. Chapter: Building Organizational Capacity to Advance Health Equity	Not applicable	Not described	Not described	Not described
Cohen et al (2013)[35]	A Conceptual Framework of Organizational Capacity for Public Health Equity Action	Local and regional programs in 7 Canadian provinces	Not described	Not described	Not described
Cohen et al (2018)[36]	Indicators to Guide Health Equity Work in Local Public Health Agencies: A Locally Driven Collaborative Project in Ontario	Ontario	Use of the indicators served as a "prompt for future planning," "helped participants to think about doing things differently," and improved internal communication within some agencies.	Time to source data, human resources	Barriers: poor data quality, time needed to source data, and limited human resources to engage (were lacking in smaller local public health agencies). Facilitators: when existing strategic plans explicitly addressed health equity, it was easier to align this work and find associated data. Having strong leadership also helped, as did having strong community relationships.

Region V Collaborative Improvement and Innovation Network on Infant Mortality (2016)[37]	Foundational Practices for Health Equity: A Learning and Action Tool for State Health Departments	Not applicable	Not described	Should be completed by a team of individuals with substantial knowledge of the organization's structures and functions	Not described
Curry-Stevens and Reyes (2014)[38]	Protocol for Culturally Responsive Organizations	Not applicable	Not described	Time, leadership commitment, and a team to implement. An implementation process is required.	Not described
De Marco et al (2011)[39]	Assessing the Readiness of Black Churches to Engage in Health Disparities Research	North Carolina	Found a range of readiness to engage, but overall readiness was high. Proximal factors, including pastor leadership and presence of a health-related budget, did appear to play a role in church readiness, whereas other church characteristics did not.	Church leadership involvement is required, as is skill in data analysis.	Some churches felt the researchers were using too much time to collect data without enough corresponding technical assistance.
Hennepin County Public Health Department (2019)[40]	Public Health Department Health Equity Assessment	Minneapolis, Minnesota	Hennepin County used survey results to identify opportunities for improvement. The county followed the initial assessment with a shorter follow-up survey 1 year later.	The initial survey takes most people 15-20 minutes to complete; the follow-up survey takes 5-10 minutes to complete.	Not described
Ingham County Health Department[41]	Health Equity Practice Evaluation	Ingham County Health Department, Michigan	Not described	Not described	Not described
Inzeo et al (2019)[42]	Advancing Coalition Health Equity Capacity Using a Three-Dimensional Framework	Wisconsin	Capacity rankings are displayed on a capacity spectrum. Across all dimensions, the cohort of coalitions had strong SDH understanding, whereas there was least understanding in areas requiring strategies to address imbalances in power and, thus, to target structural determinants.	Qualitative research skills and related time and financial resources	Limitations include that it is difficult to assess growth via descriptive data analysis. Applying this approach requires qualitative research/coding capacity. The framework did provide a way of assessing and supporting health equity capacity growth.
Noe et al (2014)[43]	Providing Culturally Competent Services for American Indian and Alaska Native Veterans to Reduce Health Care Disparities	Western region, US Department of Veterans Affairs	The 27 facilities assessed scored highly on all measures. The authors anticipated that higher scores would be associated with greater likelihood of staff perceiving that their facilities met the needs of AI/AN veterans. In general, findings did not support hypothesis; higher scores on the ORCA were not associated with greater implementation of programs and practices for AI/AN veterans. However, some substantial considerations for improvement concerning needs, leadership, and communication were identified; identifying facilities with these characteristics may also support success of new native-specific programs.	Ability to administer the survey and conduct a regression analysis	Not included
Stamatakis et al (2020)[44]	Development of a Measurement Tool to Assess Local Public Health Implementation Climate and Capacity for Equity-Oriented Practice: Application to Obesity Prevention in a Local Public Health System	Missouri LHDs	Identifies structures and processes that may be leverage points for implementation strategies to improve equity-oriented approaches in LHDs. Where implementation climate index is higher, there is a higher likelihood of engagement in assessment and planning of activities geared toward health equity. During implementation, "measures of equity-oriented implementation climate indicated areas of variability with respect to strengths and gaps across LHDs." LHD barriers to this work were conflicting priorities and lack of external support. Findings also show the importance of additional training in a number of areas.	Not described	This is a theory-based snapshot tool for organizations that do not have the capacity, readiness, or support for a more in-depth, comprehensive review (eg, BARHII).

Tagai et al (2018)[45]	Assessing Capacity of Faith-Based Organizations for Health Promotion Activities	Prince George's County and Baltimore City, Maryland	FBO-CI may be used as part of research or as a self-directed internal assessment of a faith-based organization's capacity. Additional refinement is needed from testing the tool further. Descriptive church profiles with highest, median, and lowest FBO-CI scores were examined to "illustrate the application of the FBO-CI to 3 churches of variable capacity." The FBO-CI framework was found to be promising.	The interviews required considerable time and resources to complete.	The survey was paper-and-pencil. Some participants had difficulty responding to some items as a self-assessment, so the research team determined that an interview format "would yield higher quality and more timely data collection." The survey was then distributed to the church with follow-up interviews so that it had time to collect the data. Most churches completed the interview format, while only 5 of the 34 recruited churches completed the self-administered format.
University of Wisconsin Population Health Institute[46]	Organizational Health Equity Checklist	Not applicable	Not described	Not described	Not described

Abbreviations: AI/AN, American Indian/Alaska Native; BARHII, Bay Area Regional Health Inequities Initiative; FBO-CI, Faith-Based Organization Capacity Inventory; LHD, local health department; OCA, organizational health equity capacity assessment; SDH, social determinants of health.

Appendix 3: Supplemental OCA Information

See attached PDF document

CHAPTER 3: MANUSCRIPT 2 – ASSESSING ORGANIZATIONAL CAPACITY FOR HEALTH EQUITY ACTION: A COMPARATIVE CASE STUDY

Abstract

Objective: There is little available evidence regarding how to assess public health organizations' capacity to implement and sustain health equity-focused work through organizational health equity capacity assessments (OCAs). This research aims to examine OCA implementation and the organizational impacts of undertaking an OCA.

Methods: This study utilized a comparative case study methodology to explore the factors that facilitate or inhibit the successful implementation of OCAs; and the initial impacts of implementation. The case studies documented recent OCA implementation in Kitsap Public Health District in Bremerton, WA, and the Division of Community Health and Equity (DCHE) within the Rhode Island State Department of Health. Key informant interviews (KIIs) and document analyses were conducted in each case study, with 7 KIIs conducted and 16 documents reviewed for Kitsap, and 8 KIIs conducted and 9 documents reviewed for DCHE. Within-case analysis was conducted for each case; cross-case analysis was then conducted to elicit lessons learned for future implementation.

Findings: Initial organizational impacts were quite similar in both departments and included utilizing the OCA findings in the development of short-term action plans and long-term strategies. Lessons learned from these cases for future OCA implementation include emphasizing the importance of explicit leadership commitment; the need to

adapt OCA tools to fit organizational contexts, objectives, and capacity; the value of ensuring staff participation; and the need to utilize the findings to maintain momentum and commitment to health equity work.

Conclusion: This research provides new implementation evidence for health departments considering organizational health equity capacity assessments. The results from OCA implementation are shown to be both useful and timely in guiding next steps as organizations seek to strengthen their health equity capacity. Both departments involved in this research would recommend the OCA process for other departments aiming to strengthen their health equity capacity.

Introduction

The right to the highest attainable standard of health requires "an effective and integrated health system encompassing medical care and the underlying determinants of health, which is responsive to national and local priorities and accessible to all"; this in turn requires effective coordination of health-related services provided by a range of public and private organizations, including governmental and nongovernmental organizations.[1] Health systems, and the organizations that they consist of, are core social institutions,[2] which should "communicate and enforce values and norms relating to equality."[3] Public health organizations play a key role in facilitating the "fair distribution" of health outcomes, goods, and opportunities.[4] It is therefore critical to strengthen the health equity capacity of public health organizations.

This research fills gaps in the literature related to the lack of research on assessing public health organizational health equity capacity. Understanding how to strengthen public health organizations' capacity to implement and sustain health equity-focused work is critical to achieve health equity. Many other resources exist related to health-equity capacity, but most are focused on actions that organizations can implement to strengthen this capacity. For example, the Public Health Accreditation Board (PHAB)'s Health Equity Paper provides a categorized listing of resources, examples, tools, guides and more that health departments can use to strengthen their equity actions.[5] There is also a literature review that provides information about the strategies or approaches used by organizations in Canada to increase their health equity capacity. With examples of the kinds of organizational interventions and improvements that can result from health equity capacity assessments (e.g., strengthening equity-related policies, training staff, or developing performance measures), this review is a resource for translating equity goals into practice, such as improving knowledge sharing across organizations and strengthening intersectoral and community partnerships.[6]

However, very few papers focus on the tools available for *assessment* of organizational health equity capacity. A recently published scoping review (conducted as part of this dissertation) identified 17 organizational health equity capacity assessments (OCAs) of varying length, scope, and format, developed by different organizations and research teams.[7] The scoping review found little available research regarding *OCA implementation and organizational impact.* Implementation research explores different factors of implementation including influencing factors, processes,

and results.[8] OCA-related information can be found in the gray literature, such as on practitioner websites, but we could find no examples of published implementation research that sought to illuminate the process, including the facilitators and barriers, and the outcomes of OCA implementation. This lack of accessible knowledge regarding OCA implementation is a barrier for organizations seeking to implement these assessments effectively.

This study aims to fill these gaps by answering two related research questions. First, what factors facilitate or hinder the implementation of organizational health equity capacity assessments? Second, what are the initial organizational impacts of undergoing an organizational health equity capacity assessment?

Methods

This research utilized a comparative case study with two health departments to explore the factors that facilitate or inhibit the successful implementation of OCAs. Case studies as a methodology involve exploring "how" or "why" issues or questions through the development of one or more cases within a defined system or focus area.[9] Because relatively little is known about OCA implementation, a case study is an appropriate exploratory and descriptive approach.[10] Comparative case studies are recommended for illuminating the process of organizational change.[11]

Case selection

Local and state health departments were recruited via postings in the National Association of City and County Health Organizations (NACCHO) newsletter and in the Public Health Awakened email listserv (managed by Human Impact Partners), which reaches a wide range of public health practitioners. Compensation was not offered to study participants, but the research team indicated willingness to share the case study findings and broader contextual lessons learned with participating departments, for their knowledge sharing and future utilization; participants were also able to suggest changes to the interview questions to best meet their needs. The baseline recruitment criteria included that a local or state health department should: 1) have an explicit mandate or clearly stated interest in improving health equity; 2) have recently (within two years prior to the study, approximately 2021-2022) completed the OCA process, or have plans to do so within six months; and 3) have the staff time, availability, and interest to engage in this research process. Eleven state and local health departments responded to the original call for health departments. Of those, three were subsequently non-responsive, and six did not meet the inclusion criteria because they had either postponed OCA implementation or had no timeframe for implementation, and/or they felt that they lacked sufficient staff capacity and resources to engage in the research process. These postponements and lack of capacity were, in part, due to the impacts of the COVID-19 pandemic on health departments, and were not reflective of lack of interest in the topic. Ultimately, only two departments met all three criteria. While including more than two cases was not considered feasible due to resource constraints, it was important to include two cases representing different experiences and characteristics, including differences in the size and demographics of population served, geographic location, and

history in organizational health equity capacity, to create a rich contextual set for the comparative case study.

The two selected cases were the Kitsap Public Health District (KPHD) in Bremerton, WA, and the Division of Community Health and Equity (DCHE) within the Rhode Island State Department of Health (RIDOH). The two case study departments align with the goal of purposeful maximal sampling.[9] KPHD's OCA process had been recently completed at the time of the research interviews, which were conducted from August to October 2022. DCHE conducted their OCA process in November and December 2022, with interviews conducted for this research in February 2023.

Both departments have explicit equity goals, but differing history and levels of experience with implementing health equity initiatives. In May 2021, the Kitsap Public Health Board adopted a resolution declaring racism a public health crisis, which "commits the Health Board and Kitsap Public Health District to taking specific, meaningful actions to address institutionalized and systemic racism".[12] Equity has been a KPHD focus since at least 2017, when the department published a Kitsap Health Disparity report, but equity has not historically been the sole cornerstone of the department's responsibilities. In contrast, equity is in the very name of the Division of Community Health and Equity from RIDOH, and the division – and the greater department – have long-standing experience in equity work.

As shown in Table 1, the two cases are also geographically diverse (Rhode Island and the Pacific Northwest), and diverse in population served. Population size varies from 1.09M in Rhode Island to 274,300 in Kitsap. Both departments serve a mix of urban and rural populations, with a wide range of socioeconomic status and health

outcomes. Both serve populations that are 70-79% white. KPHD also serves non-Hispanic Asian (6%), non-Hispanic Black (3%), and Hispanic (6%) residents,[12] with about 6.8% foreign-born residents;[13] RIDOH has a higher percentage of Hispanic residents (18.7%) and non-Hispanic Black residents (5.7%), a lower percentage of non-Hispanic Asian residents (3.6%), and a higher percentage of foreign-born residents (13%).[14] Further, having one state and one local health department participate in the case studies enabled us to develop implementation examples relevant to the key audiences for this research, which are public health practitioners working at state, country, tribal, and local health departments.

Table 1: Comparison of Case Characteristics

	Kitsap Public Health District	**Division of Community Health and Equity, RIDOH**
Type of health department	Local Health Jurisdiction	State Department of Health
Geography	Washington State (Pacific Northwest)	Rhode Island (Northeast)
Population size	274,300	1,090,000
Population demographics	Non-Hispanic White: 79%	Non-Hispanic White: 71.3%
	Non-Hispanic Asian: 6%	Non-Hispanic Asian residents: 3.6%
	Non-Hispanic Black: 3%	Non-Hispanic Black residents: 5.7%
	Hispanic residents: 6%	Hispanic residents: 18.7%
	Foreign born residents: 6.8%	Foreign born residents: 13%
	LGBTQ adults (WA state): 5.2%	LGBTQ adults: 4.5%
	8.7% persons in poverty	17% persons in poverty (32.9% in four main cities)

Sources of demographic data for Kitsap: Kitsap Public Health website and the U.S. Census Bureau QuickFacts - Kitsap County, Washington. Source of demographic data for Rhode Island: HRSA Maternal and Child Health. III.B. Overview of the State - Rhode Island – 2022, U.S. Department of Health and Human Services. See References for full citations.

Case study methods - Key Informant Interviews

Based on research on participation in interview-based organizational research,[15] a sample size of approximately five to twelve key informants was purposively recruited from each organization participating in the research, drawn from the following categories: leadership, staff focusing on health equity explicitly, and other staff with

less/no explicit equity focus. The participants were recommended by those responsible for leading the OCA process within their department and by departmental leadership. In both cases, these initial leadership points of contact were the people who contacted the researchers to express interest in their organizations participating in the study. Inclusion criteria for individual participants were: 1) employed at the LHD throughout the duration of the OCA exercise; 2) holding a relevant role within the organization, defined as a role with a potential health-equity related aspect, though their work may not explicitly focus on equity; and 3) adults at least 18 years of age. Purposive sampling typically shows greater efficiency than random sampling as it inherently leads to "information-rich" cases.[16] We regularly reviewed the transcripts throughout the interviews, and the sample size was adjusted as needed until thematic saturation was achieved. This approach resulted in a sufficient sample size to reach saturation, given the focused nature of the interview questions, the nature of the topic and the expected amount of usable data from each participant.[9]

Semi-structured interview guides were created to allow for open-ended interviews, which may generate new themes.[17] Semi-structured interviews allowed for the researcher to be prepared and focus on specific research aspects while also allowing participants flexibility in the discussion. The interview guides for staff and leadership (Appendix 1) were structured with questions aligned to Proctor et al.'s implementation outcomes, developed to capture the "the effects of deliberate and purposive actions to implement new treatments."[18] These outcomes can be indicators of implementation success, as well as proximal indicators of implementation processes, in relation to longer-term desired outcomes. The six implementation outcomes are

acceptability, adoption, appropriateness, costs, feasibility, fidelity, penetration, and sustainability; all of these are applicable to the research questions of this study. The interview guides thus explored each participant's experience of the OCA process's acceptability, appropriateness, etc. Health equity leaders at each department were offered the opportunity to suggest minor question modifications to the interview guide to ensure the interviews best met their needs for learning about this process within their departments. KPHD proposed a few additional probes that were specific to their context; DCHE did not request to include any changes.

The same procedures were followed for each case.[19] The interviews were conducted virtually using Zoom, and audio was recorded for anonymized transcription with participants' oral consent using the forms and procedures approved by the Johns Hopkins Bloomberg School of Public Health Institutional Review Board (#18890).

Case study methods - Document review

Health equity leadership at each department were asked to share relevant documents related to the implementation of the health equity capacity assessment. The documents that were reviewed as part of the study differed for each department. KPHD shared the two instruments that they utilized in their OCA: a survey with questions tailored to managers and employees, adapted from the Bay Area Health Inequities Initiative's (BARHII's) organizational health equity self-assessment tool and the Government Alliance for Race Equity's (GARE's) organizational assessment tool, and a discussion-based assessment that mirrored the Michigan Public Health Institute's (MPHI's) Dialogue-based Assessment Tool. They also shared key communications from

various stages of the process, including emails and presentations that had been sent to staff or shared with leadership, and their draft reports with OCA results. DCHE shared their OCA, adapted from the California Department of Public Health's Baseline Organizational Assessment for Equity Infrastructure, and their draft OCA results. Because this was their second time undertaking the OCA process, they also shared the materials that they had utilized during the first OCA process, which pre-dated the COVID-19 pandemic.

Data coding and analysis

The anonymized transcripts were uploaded to NVivo to conduct a coding process that was both inductive and deductive. The codebook was initially developed deductively around Proctor et al's outcomes, aligning with the interview guide structure. Definitions of all codes were delineated for this specific study context, adapting the general definitions from Proctor et al. Inductive codes and their definitions were also identified based on additional themes that emerged from the interviews. The lead author of this study (R.M.) applied the codebook to data from KPHD. A second coder (N.M.N.) contributed to finalizing the codebook by coding two randomly selected transcripts. This double-coding provided a validity check regarding the emerging themes and enabled the research team to collectively refine and clarify the codebook where needed.[20] Through discussion, the researchers reached consensus on the codebook, which was then utilized in the final analysis for KPHD.

Once the codebook was finalized, all KPHD interviews were coded. For the DCHE analysis, R.M. again coded all interviews using the existing codebook and N.M.N. coded two randomly-selected transcripts. R.M. and N.M.N. came to consensus

on whether additional codes were emerging from the DCHE data, and added one additional code.

Using NVivo, coding was first aggregated by organization for the within-case analysis. A report of coded themes with associated interview responses was developed to examine patterns in the data from each organization. Individual case analyses were developed for each organization. Data related to the first research question - *What factors facilitate or hinder the implementation of organizational health equity capacity assessments?* – were coded by the following themes: acceptability of the OCA, adoption of the OCA, appropriateness of the OCA, fidelity in delivering the OCA, feasibility, and cost or required resources. Sub-themes were identified related to adoption and feasibility.

Data related to the second research question - *What are the initial organizational impacts of undergoing an organizational health equity capacity assessment?* – was coded by the following themes: perceived penetration, factors influencing penetration, long-term sustainability, short-term sustainability or already-visible results, findings from the OCA process, and lessons learned from the OCA process. Proctor et al. described the application of the "penetration" and "sustainability" constructs as having a theoretical basis in the RE-AIM framework – penetration is defined like the RE-AIM's "reach" dimension, utilized in this instance to explore the reach of the OCA process and findings, and sustainability is similar to the "maintenance" dimension, exploring the changes resulting from the OCA process.[21] During analysis, we divided these constructs into sub-themes to more accurately characterize our findings. For example, we differentiated between respondents' perceptions of the penetration or reach of the

OCA's process and findings within an organization, and the positive or negative factors that were identified as influencing the OCA response rate. Given the short time horizon for this research, wherein the interviews were conducted shortly after the OCAs were implemented, it was equally important that we differentiate between comments on long-term sustainability - the long-term changes related to health equity implementation resulting, or expected to result, from the OCA process – and comments on "short-term sustainability," or changes already recognized or underway, related to use of OCA findings or next steps post-OCA.

Two additional themes emerged during analysis that relate to the second research question: findings from the OCA process and lessons learned from the OCA process. These themes capture specific reflections on the initial OCA results, and ideas regarding what has been learned through or about the OCA process, respectively. Finally, two themes emerged from the analysis are relevant to both research questions: general "perspectives on health equity," and perception of "health equity relevance" in the workplace. The former theme captures perspectives, positive or negative, on the concept of health equity; the latter captures perspectives on how health equity is or is not relevant or important to the work objectives/position of the respondent or that of their department.

The individual case analyses each incorporated high-level themes from reviews of the documents shared by KPHD and DCHE, respectively: the documents were read and analyzed using gridding[22] to capture key purposes and themes. For example, the OCAs utilized by each department were analyzed to explore their areas of focus, their aims, their structure, their method of application, and any indicators or measures

included. This analysis was triangulated with the interview findings to further elaborate on key themes. Summaries of the thematic findings back were shared with both departments, to ask if the analysis resonated with their understandings.

The within-case analysis process was followed by cross-case comparison and analysis, and ultimately the development of a final cross-case narrative with interpretations.[9,23] Cross-case analysis is appropriate when the cases represent rich examples, when comparison among cases "can construct and yield meaningful linkages,"[24] and when the data sources are "broadly comparable for this purpose even though they may vary in nature and depth."[25] For these reasons, this methodology was a good fit for this study. The cross-case interpretations focused on topics related to understanding and illuminating OCA implementation across the departments, and identifying any additional factors related to the OCA implementation process and initial impacts.

Results

Summary

Seven interviews were conducted with Kitsap participants, and eight interviews were conducted with Rhode Island participants. Sixteen documents were reviewed for Kitsap, including the three OCA tools utilized, ten email communications or presentations to staff, and three drafts of the assessment results and subsequent action plan. Nine documents were reviewed for DCHE, including six background documents, the original OCA and the adapted version used, and a draft presentation of the findings.

Findings: Kitsap Public Health District (KPHD)

Table 2: KPHD's OCA Snapshot

KPHD utilized two OCAs: a survey instrument for managers and employees, and a discussion-based assessment (see Table 2: Snapshot). All staff were asked to participate in the survey, with more questions included in the managerial version; and six leadership members participated in the discussion-based assessment. Findings below are presented by sub-themes.

> KPHD's OCA SNAPSHOT:
>
> - Surveys for managers (35 questions) and employees (26 questions), and discussion tool for leadership
> - Adapted three different OCAs
> - 92 survey respondents; 6 discussion participants
> - Utilized OCA findings to create and initiate a detailed Equity Action Plan
> - Intends to utilize the OCA process again to monitor progress

A. Acceptability and Adoption

Throughout the KPHD participant interviews with both staff and leadership, there was consensus that both OCAs' structures, questions, etc, had been generally acceptable to participants. Both OCAs required some adaptation for KPHD's purposes to ensure they were relevant and suitable to the audience. While KPHD selected the BARHII survey in part because the survey questions have been widely used, KPHD significantly adapted the tool by selecting questions that were aligned with the department's needs and modifying some highly specialized language to align with the survey audience's level of health equity understanding: "We modified the BARHII relatively substantially, I think, to be a good tool for our organization," reported one respondent. Another respondent confirmed, "I did reframe [the BARHII questions] because…it was more appropriate language for people who already talked about equity. Whereas I knew some of the other words would just kind of confused people…" Those

leading the survey effort also incorporated questions from the GARE organizational assessment tool, though that tool is racial-equity focused and they wanted a broader take on equity.

B. Appropriateness and Fidelity

Ultimately, the implemented survey included a 26-question survey for all staff and a 35-question survey for managers. The resulting survey instrument asked questions across the following areas: impressions of the work of KPHD towards eliminating health inequities, how well participants could describe the work of KPHD towards eliminating health inequities, individual knowledge and contributions to addressing health inequities, and employee work environment. For each topic area, the survey included both questions with responses ranked on a Likert scale from 1 (not at all) to 5 (very well), with an option for "don't know", and 1-3 open-ended question. The survey also asked for participants' divisions within KPHD and number of years worked at KPHD. It was perceived by participants to be straightforward, with mostly clear and appropriate questions, not too long, and easy to use. Some participants noted that some of the questions seemed similar in nature, and that minor revisions or including examples could help to differentiate between the purpose of each question. The survey had a 96% response rate for managers (n=25) and a 68% response rate for staff (n=67), with total participation from 92 of 125 staff (74%).

The discussion-based tool (utilized by the six members of the leadership team) was not formally modified prior to use. Leadership interview participants generally found it acceptable and a good fit for a leadership assessment. However, multiple of these participants mentioned that it was adapted during implementation to reflect the needs of

the participants. "…We had to kind of interpret some of the language on our own…but it was still a really interesting conversation," said one participant; another stated that "I mean, it was easy and straightforward to get through. And where we needed to we came up with points in between some of their options that were the right place for us to land."

C. Feasibility

Participants from both staff and leadership identified consistent factors that facilitated the adoption and implementation of these OCAs, including leadership support and an organizational culture that already included both equity-oriented work (prior to the OCA) and general interest in self-assessments. The fact that the Kitsap Public Health Board had adopted a resolution declaring racism a public health crisis in May 2021 was a clear turning point for the department. The resolution resulted in the hiring of the equity program manager, and staff identified increased leadership interest in "trying to make sure that internally, we are walking the walk…trying to use an internal assessment to not only fully understand the extent to which our internal leaders and managers and employees are all well versed in equity issues, and understand how to kind of implement equity-based practices into the everyday work that each and every one of us does here." Specific motivators for implementing the OCA, according to leadership participants, included an interest in understanding staff perceptions of health equity and understanding of health equity concepts; staff participants noted motivators that included understanding leadership's vision for health equity, and to start further knowledge building related to health equity.

D. Penetration and Cost

Some staff were concerned that their colleagues were "burned out" on taking surveys or may have been skeptical of the value of another survey, but the intentional process of preparing for the OCA was highly valuable in ultimately getting traction and buy-in among participants. Interviewees remarked that the process was well-planned, with leadership and manager investment; they received clear communication about the importance of the process beginning with presentations and discussions prior to survey roll-out to staff. KPHD had the resources available for implementation because they already had their health equity program manager to lead the process and available employees to provide support and analysis. Implementation barriers included the timing of the survey and the high workload of the staff. Many participants noted that they did not have as much capacity to engage with the process as they would have desired, either because of additional COVID-19-related work, or because of their ongoing regular responsibilities. Despite survey managers noting that the department directors had been consulted on the survey timing, participants from the environmental health division said that the summer is their busiest time and staff may have been better placed to respond in the winter season.

E. Key OCA findings, Perspectives on Health Equity, and Health Equity Relevance

Results were rapidly synthesized and shared first with the leadership team, then with managers and finally with all staff. The health equity program manager and team developed a full report and a highlights brief weaving together the findings from both surveys and the discussion tool. Discussing the findings helped to maintain momentum. Some participants reflected that they were not surprised by the findings. The Environmental Health Division's survey response rate was lower than that of the

Community Health division, but no respondent found this unexpected, and environmental health staff indicated that the timing of the survey was the issue. The environmental health team was otherwise highly enthusiastic about the topic and had found new ways to incorporate health equity principles into their work. Other participants, both from staff and leadership, did find themselves surprised by some results: one noted that the results reflected "just a lot more informed thought than I expected," and another stated that "it seems like maybe leadership thinks we're already at a good place [with health equity]…[but the results show that] maybe we're not as far along as the perception is by leadership." One interview participant thought that the survey results showed differences in "how our employees see our equity work versus our managers versus our directors." The survey responses frequently indicated interest in more staff communication about health equity. Meanwhile, the MPHI discussion tool instigated valuable conversation, insight, and team building among leadership. Participants from the leadership team stated that it was a useful exercise and facilitated open conversation about where and how leadership wanted to make health equity progress.

Every interviewed participant believed that health equity was highly relevant to their work, but differed in their perceptions of whether others in their organization shared this belief. For example, as one participant said, "I don't think everyone-- we don't have 100 percent who would say this is a value yet." In contrast, others felt that everyone at KPHD is an "equity champion" in different ways within their own workstream, a sentiment that was reflected across the interviews.

F. Sustainability

Both interview respondents and the final report identified multiple intended next steps – such as utilizing the results of the health equity capacity assessment in KPHD's upcoming strategic planning process, developing equity objectives for 2024 workplans, or other "ways to get the equity work integrated into all the different departments across the organization." Multiple respondents commented that this OCA process should be considered a baseline assessment, and that they would be interested in repeating the use of these OCA tools, or updated versions of the tools with more advanced questions, to track progress and measure change as the program evolves. Current responses cannot be disaggregated by workforce demographics, something the team might consider including in future iterations. Overall, leadership and staff respondents "would definitely recommend the process," because as one staff member noted "it was thorough and very sensitively done…really well done...everyone was very conscientious to involve everyone and make sure that…it was an agency wide effort."

Table 3: DCHE's OCA Snapshot

Findings: Division of Community Health and Equity (DCHE), Rhode Island State Department of Health (RIDOH)

The Division of Community Health and Equity within RIDOH utilized an OCA adapted from the California Department of Public Health's Baseline Organizational Assessment for Equity Infrastructure (see

DCHE's OCA SNAPSHOT:

- One survey tool (14 questions)
- Adapted from one OCA
- 65 survey respondents
- Has begun division-wide discussions of OCA findings as the basis for a long-term, equity-centered strategic plan
- Intends to utilize the OCA again to monitor progress
- Hopes to be an example for others across RIDOH

Table 3: Snapshot). The implementation findings are organized by sub-themes.

A. Adoption

The tool was selected and adapted by a small team of people, who "decided that the California tool would be best," in part because it could be quickly adapted and implemented. Sixty-five staff completed the survey, out of approximately 135 staff (48%). The survey instrument included 14 items, with 12 questions ranking the Division's competency across three domains – workforce and capacity, collaborative partnerships, equity in organizational policies and practices – on a Likert scale of 1 ("early") to 6 ("strong") and two open ended questions on strengths and areas for improvement.

DCHE had implemented the BARHII OCA pre-COVID, but "…we never did anything with it. I feel like it was always like those things where you take an assessment, you get really jazzed-up, and there wasn't any action in terms of after the assessment was done." Staff did not report much recollection of the process. The opportunity for another OCA was supported by a supplementary Center for Disease Control (CDC) award to the Rape Prevention & Education Program within the division. Implementation of the OCA was then expanded across DCHE's five center by division leadership. Multiple respondents stated that the division needed a "reset" or "level-setting" at this point in the COVID-19 response, which was the rationale articulated by leadership for undertaking an OCA at this time. "It's really good for us to be working on sort of a reset and doing this assessment to think about how health equity, which is part of our division name, really lends to the day-to-day operations of our work and how we bring an equity lens," said one leader, especially with some relatively new staff onboard.

B. Feasibility, Relevance, Cost, and Penetration

Indeed, leadership was recognized as a driving factor of OCA adoption and implementation. Though equity is a main work focus for DCHE, multiple participants noted that leadership championed and shepherded the OCA process in particular - a key facilitator of its success. There were no differences in the findings between the staff and leadership participants. When the OCA was underway, follow-ups and reminders from leadership and management encouraged completion of the survey tool. In contrast to DCHE's BARHII experience, these communications clearly stated "the commitment of the division to…get feedback, and to develop plans, so we can see movement over time… we are going to come up with some action items to make change"; this commitment to translate the findings into action was frequently mentioned as key to garnering participation. Small incentives were also available, but this was almost never mentioned by staff as a reason for participation.

Other facilitating factors included that the division's work is already centered around health equity, as both staff and leadership agreed. "I think we're probably in a unique position at the health department because…health equity is part of our vernacular and just part of who we are. But I could see agencies where if the concept of health equity is new or not in the bricks of your organization, where it could be a little bit more challenging…" and that background on the OCA was presented in advance. "I believe [the team] presented at a meeting, and [provided] kind of a short introduction of what it was going to cover and why we were doing it." The resources required were generally described as feasible; the OCA could be implemented with current staff, though some of the funding came from the CDC.

Barriers to feasibility and penetration included that staff time needed to be set aside for this process. Furthermore, the survey implementation took place in December, right around the holidays; thus, timing may have limited participation. "We ended up keeping the survey open longer than we had initially hoped for. And had sent multiple reminders over the, I want to say, three-week period…and encouraged leadership to verbally remind staff." One respondent also suggested that people "might be hesitant to change" and thus "worried about the consequence of the answers."

C. Acceptability

Some common themes arose regarding acceptability, including what participants thought of the structure, questions, and requirements. All DCHE colleagues interviewed felt that the assessment was generally acceptable – the questions were clear, addressed key topics, and it did not require too much time, while also providing an opportunity to think critically about important equity-capacity topics. As one staff participant described it, "I appreciated the period of reflection that the health equity assessment provided. You know, this was not an assessment that you could just kind of nonchalantly do. You really had to think about the questions. And again, I appreciated having that time to really reflect on what I thought was going on with health equity within our organization."

D. Appropriateness, Key OCA Findings, and Lessons Learned

Resoundingly, participants found the most useful component of the assessment to be the qualitative, open-ended questions. A consultant analyzed those responses and shared them with staff; interview participants found those findings to be informative. In a shared overview of results, staff-identified strengths included community

engagement, data-informed decision-making, a whole-division approach, staff and leadership dedication to equity, availability of internal trainings and dialogues. Staff also identified many potential areas for improvement or for future exploration. Examples included suggestions to invest in more equity-related professional development/training, develop additional strategic plans or policies that center equity and measure progress, and strengthen data collection and use.

In contrast, participants frequently reported struggling with ranking their responses to the twelve questions that used the Likert scale. This is visible in the results, which were all in the 3-4 point range, or a ranking of "Established: Working towards this but not fully achieved." According to both staff and leadership participants, this made utilization of the quantitative findings difficult: "…We ended up falling in the middle at about a score of 3.45 in terms of all of the competencies put together…in terms of statistical significance, it was hard to parse that out [for individual competencies] based on the quantitative data…So, that was a little bit less helpful in terms of differentiating which competencies we were necessarily better at. We didn't feel comfortable using the quantitative data to do that…"

There were multiple reasons for this challenge. Some respondents felt that it was hard to apply the Likert scale to the questions. "I think when I went through each one of these, I had to kind of toggle back and forth in my mind of are they asking us what is going on now, and how I feel-- how are we doing with this now? Or what do we feel like it should be?...and then the options from one through six, sometimes I had a hard time saying "Oh, is that a three? Is that a five?" It depends on which way I look at it…". Another participant similarly shared that they had to spend time thinking "how our work

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really fits in with the way that the questions were framed." One respondent provided feedback about the answer options: "I remember finishing the survey and thinking, 'I wish they had asked us [other answer choices] …it says, 'Early, established, or strong,' but…the answers that you were able to pick from I think could have been more expansive to allow people to really express their feelings" including choices of "Not yet" or "Planned, but not yet started."

Additionally, as a manager noted, tailoring the questions according to position type might have been useful. "...Having some different questions might generate different responses from different people…I work on a management level, so I think my perspective of thinking about this is often different than someone who has a more focused perspective on their work…". A staff respondent stated that additional questions might be useful in future iterations. For example, "the one thing that for health departments it maybe didn't address was thinking about control and limitations within the structure that health departments have to operate in, in order to operationalize their own health equity goals…I think perhaps collecting data on barriers or limitations, perceived limitations, would be interesting…". This point aligns with findings from other research, which identified externally-controlled system boundaries (such as community attributes, geopolitical jurisdiction, etc.) as a key construct of organizational capacity for public health.[26] Finally, some respondents felt that the impact of responding to the COVID-19 pandemic lowered the rankings they otherwise would have selected for the division, though they also recognized the importance of having a current baseline.

E. Sustainability

In summary, respondents were highly supportive of the OCA concept and found it thematically appropriate but would suggest considering some changes to the ranked-choice questions if this OCA is utilized again. Still, together the qualitative and quantitative data enabled DCHE to identify themes and move forward with next steps. In the short-term, these included: 1) to identify different health equity capacity training needs in new staff vs. senior staff; 2) to use the data as baselines for more specific health equity assessments of each program within the division, 3) to have "honest conversations with leadership" about identified opportunities for improvement, 4) to uplift current strengths, and 5) to identify additional actions that can be achieved in the short-term, to help sustain staff buy-in to the effort, demonstrate accountability, and ensure "that people are feeling success."

In the long term, there was common understanding across all interview participants that the main priority is to update DCHE's "vision, mission and values" as part of the development of a long-term, equity-centered strategic plan for the division. One leader articulated that DCHE's vision, mission and values have "been in place now for quite some time…We really felt like we needed to take a step back and pull everybody together, and think through updating the vision, mission, values, as well as how do we create a plan of action for the next three years to improve our approach in public health, with that lens of health equity." Staff responses reflected this sentiment. The work has already begun. A slide deck was developed to make high-level findings available to DCHE staff. In a division meeting, the OCA competency data formed the basis for a two-hour discussion regarding needed updates to the vision, mission, and values, and then in future to the corresponding goals, objectives, and activities within

the strategic plan. As described by one participant, "My understanding is that the goal is to have…a long-term strategic plan for our division at large and that equity is at the center of that, and our capacity to do that work is important, so I think that that's the goal..." Participants hoped that DCHE's work could provide a model for the rest of the RIDOH to conduct similar assessments or otherwise center equity more explicitly in their work.

Cross-Case Analysis: Similarities and Differences

Figure 1: Development of Cross Case Analysis
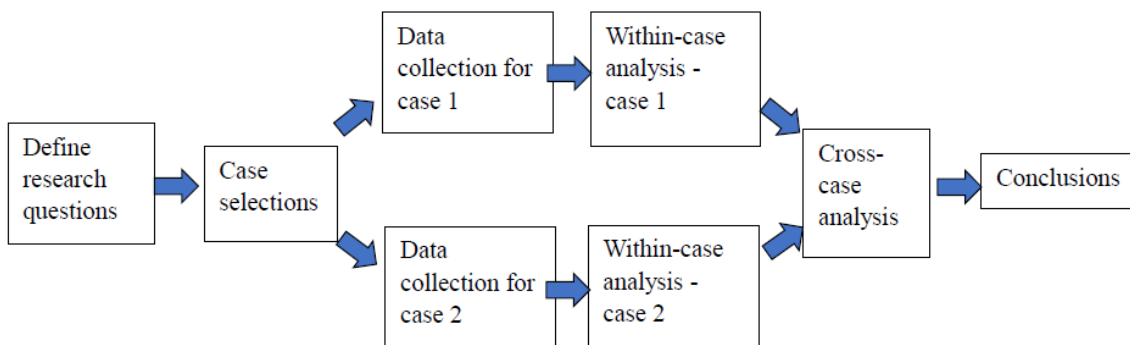
The cross-case analysis compared and contrasted findings from each case to "produce new knowledge and augment existing knowledge and experience."[24] Comparing the case studies elicited lessons learned for future implementation. A narrative model is used in this section to present the findings in a storyline.[27] Figure 1 demonstrates the process that led to the cross-case conclusions.[27]

Across the two cases, analyses of the KII and documents identified similarities and some differences in adoption facilitating factors, acceptability, appropriateness, fidelity, feasibility, cost, penetration, sustainability, and perspectives on health equity.

Sub-themes further emerged during analysis, with respondents particularly communicating similar challenges to and facilitators of both OCA adoption and OCA feasibility. Differences were also found in adoption challenges, health equity relevance, and key findings.

Shared (and frequently cited) **adoption factors that facilitated a successful OCA process** included: 1) having engaged and supportive leadership throughout the process, and 2) providing some level of initial background communication or training to all participating staff. As described above in the within-case analyses, leadership support was the most frequently mentioned facilitating factor. KPHD provided more extensive training in advance of the OCA implementation, but even the comparatively limited DCHE introduction was consistently cited as a facilitating factor.

Identified **adoption challenges** differed across organizations. No significant adoption challenges were identified by DCHE participants. In contrast, in KPHD, participants described how they needed to ensure both staff and leadership were comfortable with health equity concepts and the concept of an OCA in particular, in order to support OCA adoption. Staff also mentioned that the number of available OCAs made it challenging to select the ones that were best fits for their department.

There were similarities in **fidelity**, or whether the OCA was delivered as intended, compared to both the extant guidance accompanying the OCA, and the organization's specific plans. In both cases, participants felt they could not provide detailed information on fidelity unless they were the ones involved in their specific tool selection and adaption, e.g., many participants were not involved in this aspect of implementation. However, the interview data and document review clearly showed that

OCAs must be tailored to organizations' contexts and goals and should not be considered off-the-shelf tools. Most OCAs provide templates, but not strict requirements, for implementation; to successfully provide useful data to a department, thoughtful adaptation of any OCA is likely required. Thus, the question of fidelity is less relevant regarding whether implementation aligned with extant guidance, and more relevant to whether the organizations' adapted OCAs were implemented as they intended.

Though the two OCA processes were quite different, across both cases everyone interviewed felt that the OCA they utilized was ultimately **acceptable**. Despite providing feedback for future iterations – more extensively so in the DCHE case – participants consistently reported overall satisfaction with the OCA structure, questions, and requirements regardless of any additional feedback provided. Participants in both case studies reported utilizing small incentives for participation, which may have increased **penetration**, or the perceived reach of the OCA process and findings. Also influencing penetration was the timing of the surveys, which was challenging for both departments for different reasons, pointing to the need to carefully consider how and when implementation is planned to maximize participation. Further, while the **resource costs** were considered by participants to be reasonable for both cases, both OCAs required some level of investment – through more extensive staff time at KPHD and through a consultant at DCHE.

All participants felt that the OCAs were, overall, **appropriate** and were relevant and suitable to their organization's health equity objectives and areas of work. However, there were also differences related to appropriateness. KPHD's OCA reflected much

more extensive tailoring and adaptation, utilizing three different extant OCAs to create two different tools. KPHD's OCA was ultimately much lengthier and more involved than that of DCHE, which used one tool, and with relatively less adaptation of it. The DCHE OCA survey tool was much shorter in length than the survey used by KPHD, and it was not tailored for different audiences (e.g., different versions for leadership vs staff), compared to the way that KPHD's survey tool was differentiated for managers and staff participants. DCHE interview participants noted that tailoring the OCA survey to these different key audiences within their department would be helpful for future iterations, which is interesting considering that indeed, KPHD found this approach to be valuable.

The consistent sense of acceptability and appropriateness across both cases aligned with the findings around **sustainability**. Both departments recognized the importance of acting upon the findings and had clear plans for next steps, which they were beginning to implement at the time of research. Both departments are working to develop new strategic plans or action plans using the OCA findings, and both plan to utilize the OCA process again in the future, to monitor progress. Having clear and well-communicated plans for utilizing the findings was perceived as important to securing staff buy-in to the process, as well as being a general best practice.

Overall, participants in both cases shared some similar **perspectives on health equity,** but differences in **health equity relevance**. Participants from both departments felt positively towards the concept of health equity, and saw clear linkages between health equity, their own work objectives, and their department's objectives. Yet while DCHE staff felt confident that everyone in their division was an equity champion and could clearly link their work to health equity (e.g., health equity relevance); KPHD staff

were less certain that everyone shared this same understanding, demonstrating an area for growth.

There were also differences in the **key findings** from the two OCA processes. As discussed above, the DCHE quantitative findings were found to be relatively less useful for their intended purpose because all the competency scores were quite similar, making it hard to differentiate and understand current successes, challenges, and potential priorities. The DCHE OCA process did capture significant input on priority domains from the division staff who responded to the survey. The KPHD findings reflect a higher survey response rate across many more questions, and there were clear and useful trends in the findings.

Both departments have experience, to varying degrees, in health equity work, and both currently have explicit health equity goals. Still, the two departments had

Table 4: Summarized Objectives and Outcomes of the KPHD and DCHE/RIDOH OCA Processes

differing capacity needs – resulting in the selection of different OCAs to use for this process, according to their slightly different purposes – and as such, the selection of different OCAs may have influenced participant responses in this research. Table 4 compares summarized objectives and outcomes of the OCA process across departments. A key finding is that it is important to ensure all participants share a consistent understanding of the OCA goals, broader departmental equity goals, and specific OCA terminology utilized, for the assessment to be as useful and sustainable as possible.

	Kitsap Public Health District	Division of Community Health and Equity, RIDOH
OCA goal(s) as provided in writing	The goals of this assessment were to (a) determine a baseline from	1) Identifying DCHE's strengths and weaknesses in addressing/embedding

to the research team	which we can assess progress in our equity work, (b) identify work we need to do to enhance our equity practices, and (c) engage our employees at every level in the development of our equity work.	health equity in our work, partnerships, policies, and the DCHE workforce. 2) Garnering input from staff to learn how we can address areas for improvement. 3) Identifying action steps that can be taken by the Division/Department to bolster strengths and address areas for improvement.
OCA goal(s) as articulated by interview participants	The leadership team was interested in understanding staff perceptions and knowledge of health equity, clarifying leadership's vision for health equity, and initiating further knowledge building related to health equity.	The goals were to conduct a reset and review the division's mission, vision, values, starting with this equity assessment; to identify strengths and weaknesses; and to understand how to begin to move this work forward.
Short-term utilization of OCA findings	Shared findings with the department, developed draft action plan, and began consideration of how to implement trainings and develop other resources.	Initiated division-wide discussions of OCA findings, plans to follow up with interviews and focus groups and to identify short-term action items.
Long-term utilization of OCA findings	Plans to utilize OCA findings to create a detailed Equity Action Plan. Plans to include equity-related objectives in annual workplans. Intends to utilize the OCA process again to monitor progress.	Plans to utilize division-wide discussions of OCA findings as the basis for a long-term, equity-centered strategic plan. Intends to utilize the OCA process again to monitor progress.

The table demonstrates that for both departments, the written OCA goals slightly differed from the goals as described by department staff, leaving room for multiple understandings of the objective(s) of the OCAs. These differences in understanding may have impacted how staff perceived the facilitators and challenges of OCA implementation. However, as seen in the table, the short-term and long-term utilization plans for the OCA findings were quite similar in both cases, and overall, there were high levels of consistency both within cases and across cases on many of the key implementation outcomes. These consistencies contribute to the analysis of key lessons learned for future departments to consider at each stage of the OCA process (Figure 2).
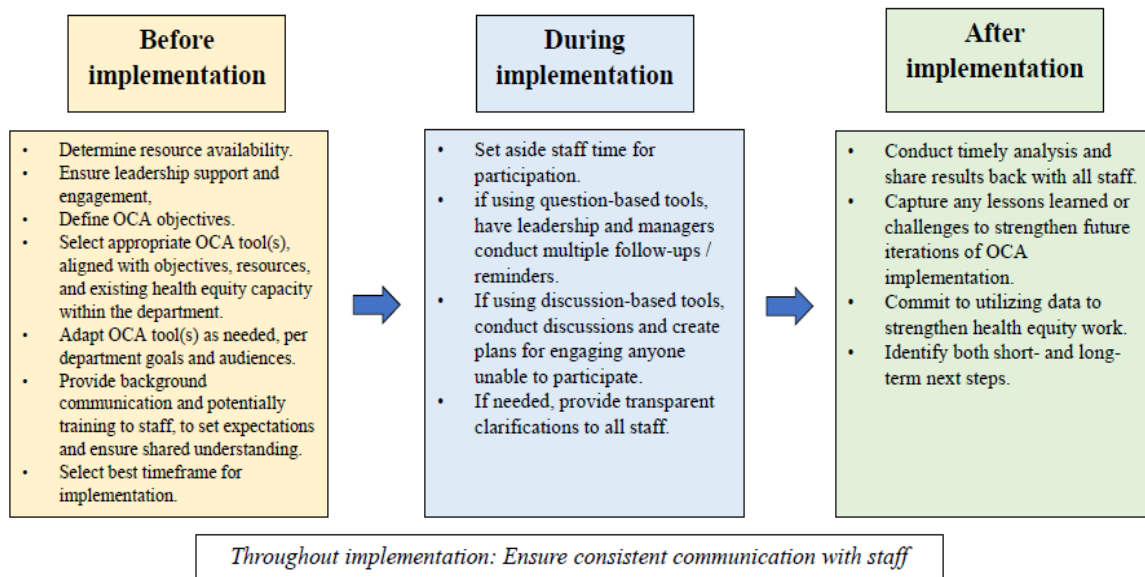
Figure 2: Cross-Case Analysis: Key Considerations for Each Stage of the OCA Process

Discussion

This research identifies key considerations for each stage of the OCA process: before, during, and after implementation. These findings are a new contribution to the literature at the nexus of implementation research and health equity capacity strengthening, and highlight important practices for OCA implementation specifically.

Many of these cross-case comparison findings are consistent with existing evidence from the literature. For example, both departments' assessments utilized both quantitative and qualitative components, and the combination of data was highly useful to their key takeaways. This aligns with research on the potential value, depending on the context, of using mixed methods in evaluation and assessment approaches.[28] Piloting assessment tools – for both qualitative and quantitative assessments – is a recognized best practice[29,30]; this recommendation also emerged from this case study

based on participant responses to the OCA tools. A pilot process also helps to ensure that participating staff share a common understanding of specific components necessary to support assessment success, including both shared understanding of the definition of key terms used in the assessment, and shared knowledge of departmental equity goals.

Leadership support was identified as a primary factor in facilitating staff participation, and thus of OCA success. The importance of the leadership role is similarly clear from elsewhere in the literature about organizational change in other contexts.[31,32] Finally, any assessment is only useful if the findings is utilized appropriately, but research shows that evaluation results are frequently not used.[33] This research demonstrates that for OCAs, an upfront organizational commitment to using the OCA data in a timely way was both a facilitating factor in ensuring staff participation, and critical to the productive outcomes of the OCA process.

There are multiple reasons why these findings are valuable. The lessons learned meet the requests of practitioners for more examples and evidence related to implementing OCAs, for example as reflected in the feedback received in the evaluation of the Health Equity Guide.[34] This research also responds to a call for increasingly centering health equity within implementation science, addressing many of the recommendations of one recent review – to study what is already happening in equity capacity strengthening work; to engage organizations in "internal equity efforts;" and to build organizational capacity, not only in health equity generally, but specifically in equity-related implementation science.[35] Finally, the findings serve to advance existing research that has historically focused on specific aspects of equity-oriented capacity

building. One example is existing work on the importance of leadership within health care organizations' change management efforts aimed at addressing disparities.[36] This comparative case study adds to this work within the public health context, finding that leadership is one of the most critical factors in successful OCA processes - without engaged and committed leadership, strengthening and sustaining a health department's health equity capacity, is an uphill challenge – but also recognizing the importance of multiple facilitating factors combining to ensure a successful OCA process.

Overall, this research had multiple strengths. This research provided new implementation evidence for health departments in this area. Three strategies – using rich data, triangulating the interview data with the document data, and seeking peer debriefing where possible to confirm findings – were used to support credibility, dependability, and confirmability.[37]

Study limitations include that these findings may have limited transferability to organizations with different characteristics. The work was reliant on the participation of key organizations. Staff members may have felt pressure to represent positive outcomes of the OCA, though participants were quite willing to share feedback throughout the interviews. This research may also have been impacted by recall bias, wherein participants incorrectly recall past events, which may impact the validity of the findings. If this bias was present, its impact was minimized because the interviews were conducted as close to the implementation timeline as possible to minimize the recall period. In addition, social desirability bias may have been present, which means that participants may have provided specific answers that they perceived to be more

acceptable or desired.[38] Participants knew the responses would be anonymized, which helped minimize the impact of social desirability bias of the findings.

Conclusion

This research identified key factors that facilitate or hinder the implementation of organizational health equity capacity assessments. These findings will benefit the field of health equity practice by providing recommendations for future OCA implementation. These recommendations can be divided into categories for before, during, and after OCA implementation. Prior to implementation, recommendations include to first determine resource availability, ensure leadership support and engagement, and define clear OCA objectives; to select and (if needed) adapt the appropriate OCA tool(s) based on these objectives and resources; and to provide background communication and potentially training to staff and consider the best time frame for implementation. Recommendations during OCA implementation include to set aside staff time for participation, when and how to provide consistent and transparent clarifications to all staff, and have a plan for engaging staff to ensure sufficient participation, such as offering small incentives or conducting follow-ups. Finally, after OCA implementation, it is important to conduct timely analysis and share results back with all staff, capture any lessons learned or challenges to strengthen future iterations of OCA implementation, and commit to utilizing the data to strengthen health equity work in both the short- and long-term.

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Appendix 1: Interview Guides

<u>LHD Leadership Key Informant Semi-Structured Interview Guide</u>

1. Can you tell me why and how you decided to undertake an organizational health equity capacity assessment? *(Adoption)*
   a. When did you make this decision?
   b. Who contributed to this decision?
   c. Did you face any barriers in making this decision?
   d. Did anyone or anything particularly help you decide to undertake this assessment, or help you communicate about this plan with your staff?
   e. Do you have official "health equity" champions or staff who explicitly work on health equity within your LHD?
2. Why did you/your organization choose (the specific OCA)? *(Adoption, appropriateness)*
3. When you reviewed the OCA materials, did you think they were a good fit for [LHD]? Why or why not? *(Appropriateness)*
   a. (if needed): Were the questions relevant to [LHD]'s capacity related to health equity?
   b. Did the question areas target the areas of organizational capacity that you expected?
   c. Did you make any edits or adjustments to the questions or to any other part of the assessment, before sharing it with your staff? Why or why not?
4. When participating in the assessment yourself, what did you think of the questions in the assessment? *(Acceptability)*
   a. (if needed) Can you tell me whether you felt the questions were clear?
   b. Overall, was the length of time that you spent on the assessment too much, too little, or just right?
5. Thinking about your process of selecting and then undergoing the assessment, would you or would you not recommend this to others as a feasible, or manageable, process? *(Feasibility)*
   a. What, if anything, from your perspective, made the process more challenging?
   b. What, if anything, from your perspective, made the process easier?
6. What resources were needed to conduct the assessment? How much time did it take? Did you have support from [relevant local supervisory or oversight]? (*Cost*)
7. Tell me what you think of the results of the assessment.
   a. Ultimately, was the tool itself useful?
   b. Was the process of using the tool useful?
8. What, if anything, has changed about [LHD]'s capacity to conduct health equity-centered work since getting the results from the assessment? *(Sustainability)*
   a. Potential probes [will be tailored for the content of the selected assessment]: staffing changes, revised LHD mission/objectives, perceived shift in organizational "culture" or "tone" related to health equity, perceived shift in staff motivation, changed leadership approach to health equity,

changed use of available resources, change in training, new/revised policies, new/revised program planning
   b. Do you expect to see long-term changes as a result of this process? Why or why not?
   c. Is there a specific sustainability plan to continue or maintain this effort?

(if there is time)
9. In general, would you or would you not recommend *this specific assessment* to someone at another department interested in assessing their organization's health equity capacity? Why or why not?
10. In general, would you recommend the process of undergoing *any* assessment related to health equity capacity? It does not have to be this particular one. Why or why not?
   a. Probe if needed: Do you see anything useful in going through the process?
   b. Probe if needed: Do any barriers or facilitators come to mind that we have not discussed? Anything that helped you or posed challenges to your process?
11. Is there anything else you would like to tell me about your experience?

Staff Key Informant Semi-Structured Interview Guide

(pre-screen question): Did you participate in the organizational health equity capacity assessment process? Was it required for you to participate, or was it voluntary?

1. When did you find out about the health equity capacity assessment process? *(Adoption)*
   a. What did you think when you first heard about it? *(Adoption)*
2. When participating in the assessment yourself, what did you think of the questions in the assessment? *(Acceptability)*
   a. (if needed) Can you tell me whether you felt the questions were clear?
   b. Were the questions easy for you to answer?
   c. Overall, was the length of time that you spent on the assessment too much, too little, or just right?
   d. Did you perceive that there was anything missing from the questions?
3. About how much time did it take you to participate in the assessment?
4. Do you know if your colleagues participated in the assessment? *(Penetration)*
5. Thinking about your experience in undergoing the assessment, would you or would you not recommend this to others as a feasible, or manageable, process? *(Feasibility)*
   a. What, if anything, from your perspective, made the process more challenging?
   b. What, if anything, from your perspective, made the process easier?

6. Were the results of the assessment communicated to staff across [the LHD]? Who communicated with you?
7. Did leadership champion this assessment process? Did anyone else emerge as a champion?
   a. Do you have official "health equity" champions or staff who explicitly work on health equity within your LHD?
8. What do you think of the results of the assessment?
   a. Ultimately, was the tool itself useful?
   b. Was the process of using the tool useful?
9. What, if anything, has changed so far about [LHD]'s capacity to conduct health equity-centered work since getting the results from the assessment? *(Sustainability)*
   a. Potential probes [will be tailored for the content of the selected assessment]: staffing changes, revised LHD mission/objectives, perceived shift in organizational "culture" or "tone" related to health equity, perceived shift in staff motivation, changed leadership approach to health equity, changed use of available resources, change in training, new/revised policies, new/revised program planning
   b. Do you expect to see long-term changes as a result of this process? Why or why not?
   c. Is there a specific sustainability plan to continue or maintain this effort?
10. In general, would you or would you not recommend *this specific assessment* to someone at another department interested in assessing their organization's health equity capacity? Why or why not?
11. In general, would you recommend the process of undergoing *any* assessment related to health equity capacity? It does not have to be this particular one. Why or why not?
    a. Probe if needed: Do you see anything useful in going through the process?
    b. Probe if needed: Do any barriers or facilitators come to mind that we have not discussed? Anything that helped you or posed challenges to your process?
12. Is there anything else you would like to tell me about your experience?

CHAPTER 4: MANUSCRIPT 3 - STRENGTHENING HEALTH EQUITY ACTION – A WHITE PAPER

Executive Summary

This white paper focuses on how improved research and practice related to organizational health equity capacity assessments can support organizational health equity capacity development and result in long-lasting organizational change, with the aim of ultimately improving health equity practice to improve health outcomes for all. The white paper places the findings of new case study research into broader context, and details how organizational health equity capacity assessment (OCA) implementation is highly relevant to the broader field of health equity practice. The paper makes recommendations regarding the ways that public health departments can utilize OCAs, and identifies needs and opportunities for future research.

Introduction

"Achieving health equity first begins with building knowledge, understanding and capacity within your organization or agency…Health equity is a framework within which public health practitioners from all disciplines can work".[1]

There has been relatively little research conducted on how to assess and strengthen the health equity capacity of public health organizations, yet this capacity is critical to the effectiveness of equity-oriented public health practice. The lack of research in this space has repercussions for the practitioners in state, county, tribal, and local health departments who are attempting to strengthen their organizations' capacities related to health equity action.

The foundational assumption of health equity capacity-strengthening efforts is often that employees at public health organizations are oriented towards, and supportive of, improving health equity, as one of their key mandates. That is not always the case. In a 2017 study on how local health departments (LHDs) understand and address health equity, researchers collaborated with thirteen LHDs in North Carolina and found that LHDs are "ideally situated between the research and practice worlds to address health equity locally" and that we need to "ensure LHDs hold an understanding of health equity, have the means to realize facilitators of health equity work, and recognize the complex context in which health equity work exists".[2] Another study reviewed data from the 2017 Public Health Workforce Interests and Needs Survey (a nationally representative sample of 47 state health agencies, 26 large LHDs, and 71 mid-sized LHDs) and found that there is not always consensus among public health agency employees regarding the appropriate role of their agency in addressing health equity and the social determinants of health. The study found a lack of research around public health practitioners' readiness to promote health equity through their work and called for further interventions to align employee actions with organizational priorities.[3] Similarly, a 2016 survey of a random sample of 537 state health department (SHD)

practitioners found that only 9% rated equity as a current aspect of their work, suggesting opportunities to improve the incorporation of health equity at the organizational, institutional, and governmental levels.[4]

Findings from these studies show a critical discrepancy between the current state of organizational capacity in health equity and in health equity integration within the public health workforce, and the many stated goals and objectives related to health equity at the local, state and national levels. Health equity is an increasingly prioritized goal across the country, from the national health objectives in Healthy People 2030[5] to the local jurisdictions declaring racism a public health crisis.[6] It thus follows that there is increasing interest in developing organizational-level capacity to strengthen departmental health equity practice, as exemplified in a plethora of current and emerging resources and guidelines, including but not limited to the Foundational Public Health Services in 2022,[7] an emphasis on equity in the Public Health Accreditation Board Version 2022,[8] the process led by NACCHO to update the Mobilizing for Action through Planning and Partnerships (MAPP) framework to "to center principles of health equity and community engagement",[9] and more. Organizational capacity can be defined as an organization's ability to implement a specific policy or objective effectively and aligned with "institutional expectations" (in this case, to implement equity-oriented public health programming that facilitates achievement of heath equity objectives); research has shown that organizations will not undertake new or shifted practices unless they have sufficient internal organizational capacity to do so.[10] As such, one key aspect of strengthening organizational health equity work is through the use of organizational

health equity capacity assessments (OCAs), which provide understanding of the state of internal capacity.

OCAs can be particularly valuable for the success of Public Health 3.0, a vision proposed by the Department of Health and Human Services for a "new model of public health" with increased focus on social determinants of health (SDH) in order to achieve health equity. Local health department capacity in these areas is described as central to the "foundational infrastructure" necessary for achieving the Public Health 3.0 objectives.[11] If achieving Public Health 3.0 requires prioritizing equity through organizational strategic plans and initiatives,[3] OCAs can make health equity capacity a more actionable construct for health departments conducting, or intending to conduct, equity-oriented work. OCAs can provide baseline data to inform strategic planning, provide opportunities to engage staff on health equity topics and assess staff needs, allow for ongoing capacity monitoring, and more.

Yet public health organizations – even those with clear health equity objectives or goals – are not regularly utilizing OCAs, either as a first step in their health equity journeys or as an ongoing monitoring tool. The lack of OCA uptake may be in part because OCAs are a newer concept for many and have not been sufficiently studied. The extensive literature related to health equity includes evolving efforts to define health equity, measure health inequities and disparities, justify the importance of health equity from a range of perspectives including as a social justice issue and a human rights issue, and develop and improve interventions to reduce inequities, but there are few publications in either the peer-reviewed or gray (practitioner) literature related to OCA implementation, utilization and impact. One of the most extensive resources available

specific to health equity capacity is the Health Equity Guide (HEG), managed by Human Impact Partners, which provides a wide-ranging set of potential strategic practices and existing case studies (many otherwise unpublished) for health departments to advance health equity both internally and externally.[12] In a 2019 survey conducted for an evaluation of the HEG, 86% of SHD respondents and 73% of LHD respondents reported that they were working to build organizational capacity to advance health equity in their communities in some way, and those who provided more detailed responses planned to use the HEG's resources for planning specific actions such as the development of organizational strategic plans, health equity action plans, or accreditation plans.[13] Respondents requested both guidance on where to start – which key practices to consider, or which assessment to utilize – as well as additional case studies.

These gaps were the impetus for this research, which first involved a scoping review and then an implementation research study related to OCAs. The scoping review filled a key gap in the literature by identifying and characterizing the OCA tools that have been developed.[14] The publication of this scoping review ensured that a collated and clearly-defined set of the OCAs available at the time of research is now available to practitioners. The scoping review also found little published evidence on OCA implementation or impact. The subsequent implementation research study utilized a comparative case study focused on two departments, the Kitsap Public Health District (KPHD) in Bremerton, WA and the Division of Community Health and Equity (DCHE) from the Rhode Island Department of Health (RIDOH), to provide recommendations and

considerations regarding how to implement an OCA effectively and what the results of doing so might be.

This white paper combines these findings with additional literature and identifies multiple opportunities regarding future OCA implementation, organized into two sections. First, this paper makes recommendations regarding the ways that public health departments can expand the use of OCAs to achieve public health goals. Second, the paper makes recommendations for future research to continue to build the OCA evidence base, including regarding increasing OCA effectiveness and better understanding OCA impacts and implications.

I. Recommendations for Public Health Departments

State, county, tribal, and local health departments have many reasons to strengthen their organizational health equity capacity. OCAs are currently an under-utilized component of health equity practice. To that end, there are opportunities to expand and build upon the utilization of OCAs, including: 1) to strengthen organizational emergency preparedness, 2) to prepare for accreditation, 3) in tandem with other equity tools, and 4) to contribute to and strengthen knowledge sharing and learning

1. Emergency Preparedness

One area of potential OCA utilization is emergency preparedness. During the early months of the COVID-19 pandemic, the Centers for Disease Control and Prevention (CDC) launched a Chief Health Equity Officer Unit with the aim to address

COVID-19 related inequities. The four implementation strategies included working with health departments to improve reporting of equity-related data; expanding COVID-19 programs to reach especially "vulnerable" populations with culturally-appropriate efforts; increasing support for frontline and essential workers; and building a diverse public health workforce.[15] While these efforts enabled an emergency response that was more equity-centered than previous emergency responses, analyses of the nationwide CDC response show that it still took time and significant financial resources to implement and in some cases the mitigation strategies had unintended consequences, such as when business closures resulted in unemployment.[15] Findings from this review of the CDC response identified the need to develop and maintain ongoing organizational capacity to respond to future health emergencies through a health equity lens. Participants in both the Kitsap and Rhode Island case studies included in the previously mentioned research highlighted that while COVID-19 demonstrated the importance of their equity-related work, it also created new challenges due to the overwhelming and burdensome nature of the multi-year emergency response.[16] As exemplified in these case studies, which was consistent with findings from the recent CDC response analysis, the OCA process should be considered a critical component of public health emergency preparedness. OCA implementation creates a baseline understanding of organizational health equity capacity, identifies areas for growth, and can be utilized for ongoing monitoring. The scoping review that was conducted as part of this broader research did not identify any OCAs that explicitly incorporated emergency preparedness. However, the common health equity-capacity themes that OCAs assess (e.g., many OCAs address budget alignment and resource allocation, internal structures, use of data, staff

training/support, and/or staff diversity)[14] should be considered fundamental capacities for future equity-centered health emergency responses.

2. Accreditation

Health departments could also be encouraged to explore OCA implementation as a component of their accreditation process. In the newly-launched Public Health Accreditation Board (PHAB)'s Standards and Measures Version 2022, health equity is emphasized across every domain.[8] Equity was also added as an eighth Foundational Capability in the 2022 Foundational Public Health Services revisions, which elevated "its importance as a cross-cutting skill and capacity" and reinforced "its critical role in ensuring community health and well-being."[7] OCAs are not required documents as part of the accreditation process, but can "potentially be used as documentation" to meet certain accreditation standards or to determine accreditation readiness.[17] OCAs have the potential to help organizations progress and monitor change along the four stages of transformation described by the PHAB toward committed equity-centered work – moving from the status quo to committed, active equity-centered work.[18] PHAB commissioned a paper that synthesized the recommendations for advancing health equity practice among local health departments which provides examples of how some departments have undertaken this capacity-building work.[19]

3. In Tandem with Other Health Equity Capacity Tools

Departments considering OCA implementation could utilize OCAs as part of a holistic approach to health equity, along with other capacity-building tools and

processes that might complement the OCA process. These tools and processes could be incorporated sequentially or in tandem with an OCA, depending on the organization's needs. A few examples include: improving institutional capacity for health equity-oriented research through strengthened networking, collaboration and cooperation;[20] embedding mentorship programs to help prevent staff turnover and knowledge loss among underrepresented populations working within public health fields;[21] and seeking technical assistance, such as that provided by the National Collaborative for Health Equity to equip "institutions and leaders from historically marginalized and excluded communities with tools to improve the social, economic, and environmental conditions that shape health,"[22] or that provided through a model called the Institute for Equity in Birth Outcomes (EI),[23] which provides technical assistance over a set time period.

This holistic approach to capacity strengthening could be especially useful for departments applying a multi-sectoral lens to their health equity work. Public health departments partnering with government agencies, partners, and communities from other sectors to improve health equity can benefit from a range of complementary resources, which can help carry the work forward after the OCA provides a critical internal baseline. A report on governmental use of racial equity tools to address systemic racism and the social determinants of health provides key information on the many jurisdictions nationwide working with organizations such as the Governmental Alliance on Race and Equity (GARE) and PolicyLink to utilize racial equity tools to shift behavior and policies and operationalize racial equity efforts.[24] This report provides a snapshot of the jurisdictions using these tools and the impacts of doing so, ranging from strategic planning to law and policy change. On the Racial Equity Tools website is a list

of wide-ranging resources on developing organizational capacity to sustain racial equity work.[25] Additional tools that may be relevant from a multi-sectoral perspective include those found in a Wilder Research report, which includes a wide range of equity-related tools for organizations with different mandates such as those in housing development,[26] and the Institutional Racism Scale, which can be used to assess organizational commitment to the reduction of institutional racism.[27] The Institutional Racism Scale is an example of the type of tool or approach that can help determine an organization's readiness for health equity work, which is the key underlying pre-requisite of this research's conceptual model. These tools and assessments are additional initial steps that can facilitate strengthened implementation based on what health departments learn through using these tools.

4. *Contributing to Knowledge Sharing and Learning*

Findings from the case study that was conducted as part of this larger research study highlighted the need for increased knowledge sharing and learning opportunities related to health equity capacity strengthening.[16] The need for better knowledge management includes both increased knowledge sharing within an organization, which can be facilitated through the OCA process and follow-ups, and also across multiple organizations working to improve health equity. Individual departments implementing OCAs should ensure they are documenting and sharing their process and findings for others to learn from to facilitate learning across the public health community. OCA tools that are developed or adapted for specific departmental needs could be published and shared on practitioner websites for others from similar contexts to utilize. The results of

the OCA processes could also be documented and shared more readily. Though these may be different in each organization, there are many useful lessons learned to be found in understanding the types of approaches to OCA methods that worked well or did not work well (for example, utilizing a quantitative, qualitative, or mixed-methods tool or set of tools); in the types of data produced and its utility; in further documentation of short-and long-term uses of the OCA findings; and in understanding how different departments define terms such as health equity and health disparity, and how – or if – departments are ensuring shared staff understanding of these terms and related departmental goals, prior to OCA implementation.

Improved sharing of lessons learned would be valuable for many reasons. One reason is that it would help departments considering an OCA to understand the different approaches that can be taken. Many departments, for example, intend to utilize the BARHII Toolkit because it is the most well-known and comprehensive. However, the BARHII implementation process is lengthy, requires resources, and often needs significant adaptation for the specific departmental context. As a result, if looking only at the BARHII option, some departments may feel that they do not have the capacity to undertake a valuable OCA process. It would be immensely valuable to hear from departments that have utilized other OCAs and found the process to be constructive and beneficial. Many other OCAs exist that can help a health department assess its health equity capacity in more targeted or incremental ways.

There are multiple platforms and groups that could facilitate this knowledge synthesis and sharing. Two organizations that have long worked to create opportunities for knowledge exchange are Human Impact Partners (HIP) and the National Association

for City and County Health Organizations (NACCHO). HIP could include updated OCA examples, if documented, on its website and in its resources. NACCHO's work includes convening an Accreditation Coordinators Learning Community for accreditation coordinators to share experiences and learning,[28] which would be an appropriate avenue for OCA knowledge exchange. The Association of State and Territorial Health Officials (ASTHO) would also be well-placed to advance this work. While there is not clear data on the number of state health department practitioners whose work has a primary equity focus, health equity is a key theme for many SDHs, per a survey conducted by ASTHO and the US Department of Health and Human Services' Office of Minority Health.[19] Improved knowledge sharing on OCA implementation lessons learned could be facilitated by these or other organizations, which would help to strengthen health-equity related communities of practice and learning networks.

II.   Recommendations for Future Research

There are many opportunities for future research that can help to further illuminate the development of public health equity capacity, and the long-term impacts of improved capacity on health equity programs and outcomes. These research opportunities include 1) exploration of additional themes to include in future OCAs, 2) additional research around long-term impact of OCAs, and 3) the opportunity to further draw upon the organizational change/organizational development fields to strengthen the likelihood of successful OCA implementation and impact.

1. Explore Additional OCA Themes and Audience Needs

Further research could identify what is missing from currently-available OCAs, to inform future OCA development and adaptation. For example, though this white paper discusses the relevancy of health equity capacity during public health emergencies, a review of the extant literature did not identify any OCAs in the scoping review that explicitly incorporated equity-related emergency preparedness capacities.[14] Primary data collection from a case study of local health departments identified other potential gaps. Many OCAs do not, for example, include sufficient questions on those external systems aspects that can create barriers or challenges to developing internal organizational health equity capacity. These external structural factors and determinants, such as political environments, partnership opportunities, funding levels, and more, have been recognized across other research as highly relevant to the ability of public health actors to implement health equity work[29] but their linkages to internal capacities are not clearly captured in most OCAs.

OCAs also do not generally specify baseline prerequisites or underlying factors that are required, or at least beneficial, for departments to have a place prior to OCA implementation to ensure OCAs can be effective. Many OCAs also do not include definitions of health equity or health equity capacity. It would be valuable to be able to articulate precisely what level of baseline capacity is necessary before embarking on OCA implementation, in order for this implementation to be successful. From this research, this would likely include at minimum both shared understanding of the definition of key terms used in the assessment, and shared knowledge of departmental equity goals. However, this could be informed by future research.

Additionally, there is a need to continue tailoring OCA tools to specific types of public health departments. For example, research with tribal departments found "a lack of consensus on how to conceptualize and measure equity within and across tribes."[29] Most OCAs are not intended specifically for tribal use. Further work, including by continued engagement with different public health audiences and communities, is needed to ensure OCAs exist to meet the needs of distinct public health audiences. Increased engagement with tribal health departments, for instance, would help ensure that OCAs and health equity capacity building efforts in general are aligned with departmental and community priorities.

2. *Understanding Long-Term Impacts*

There are significant research gaps regarding the long-term impacts of the OCA process. Future implementation and evaluation research could include questions regarding whether there are subsequent changes in equity-centered implementation after OCA implementation; how best to utilize OCAs to assess changes in organizational health-equity capacity over time; and what the potential contributions to are key health and health equity indicators to which the organization's work contributes. Change in health inequities is not an immediate proximal outcome of this work; however, because a fundamental assumption of the OCA process is that the implementing department aims to improve health equity, identifying opportunities to document contributions to this population-wide objectives - and to capture shifts along this pathway - could be useful for these departments. This type of monitoring and evaluation might explore linkages to outcomes such as changes in policies, individual

practice of healthy behaviors, or improved service delivery quality, and/or other focus areas and audiences.

3. *Incorporating Organizational Development Literature into OCA Research*

Finally, assessments such as OCAs are one component of capacity-building frameworks intended to increase the adoption and implementation of evidence-based interventions, but it can be challenging to translate existing evidence to new contexts.[30] A recent review called for greater integration of health equity into implementation science, finding that implementation science should – among other recommendations – better "study what is already happening…[and] engage organizations in internal and external equity efforts".[31] The case study previously mentioned involved implementation research that included a comparative analysis of two individual case studies to elicit key findings that may have relevance in other similar settings. Aside from this case study, the literature is otherwise very sparse on this topic. It is imperative to have more data on how health equity capacity-building interventions, such as assessments, are delivered, and to better understand the resulting changes at an organizational level, in order to help more public health departments envision, fund, and implement effective capacity-building processes. Further research on OCA implementation would contribute to this body of evidence.

One approach to future research could be to draw more explicitly upon concepts from organizational development literature. The common themes frequently found in the OCAs, such as organizational culture and leadership, resource use, internal structures and staffing, use of data, policies and program planning, may require unique

consideration in regard to specific health equity capacity within public health departments - but are conceptually connected to the broader field of organizational development. Organizational development brings the behavior change and organizational management fields together, providing "a set of behavioral-science-based theories, values, strategies, and techniques aimed at planned change in the organizational work setting."[32] Organizational change theories can be applied to identify the behavioral and social norm changes needed to successfully implement an organization's objectives; many potential explanatory factors and key approaches are proposed in major organizational change models to conceptualize, organize, prioritize, enact, and maintain change.[33] Well-known examples include Kotter's eight-step model that identifies some constructs particularly related to achieving equity goals, including power issues around making change, establishing a sense of urgency, and the development of change agents;[34] Beckhard and Harris's change model that describes facilitating organizational factors that need to be in place for change to occur and barriers that create resistance to change;[35] Nadler and Tushman's work that identifies some of the key "sub-systems" within an organization that interact to enable or prevent change from occurring;[36] and Rogers's diffusion of innovations theory that identifies individual leader characteristics, internal structural characteristics, and external characteristics that impact an organization's ability to implement innovation and change.[37] The field of organizational development is a rich resource for public health organizations and researchers aiming to advance OCA development and implementation.

Organizational development research could be effectively leveraged in explorations of how to create and sustain organizational capacity health equity improvements after OCA implementation. For example, there is research on incorporating gender equity into organizational change.[38] Other research has explored local health department leadership and contextual characteristics that are significantly associated with conducting more activities to address health disparities.[39] A recent study sought "to identify the key components necessary for health systems to implement systematic organizational change to promote health equity," and found that while decisions "vary depending on an organization's internal and external environments," participating managers and leaders identified core components "consistent with the literature on organizational change…[including] (a) committed and engaged leadership; (b) integrated organizational structure; (c) commitment to quality improvement and patient safety; (d) ongoing training and education; (e) effective data collection and analytics; and (f) stakeholder communication, engagement, and collaboration."[40] These are common themes in the OCAs for public health organizations, and indicate that health departments could effectively draw upon the body of organizational development work to strengthen the feasibility and impact of their organizational change efforts.

Conclusion

Organizational health equity capacity refers to the relative capacity of the organization to design, implement and/or fund, manage, evaluate, and sustain health equity-oriented work. Nationally, the level of organizational health equity capacity within

governmental public health is not known. This white paper identified additional research needs that would help to strengthen the impact and implementation of OCAs. Documentation of future OCA implementation and impact will help to expand this evidence base further as the health equity and social justice fields continue to evolve. This white paper also highlights opportunities for health departments to utilize OCAs to achieve more equitable public health emergency preparedness, support equity-oriented public health capabilities through accreditation, and facilitate multi-sectoral, collaborative progress towards improved health equity action.

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CHAPTER 5: SUMMARY

Overview

This dissertation contributes to the literature on health equity practice by advancing our knowledge related to organizational health equity capacity assessments (OCAs). This research contributes to strengthening health equity action across public health organizations. Many organizations now maintain an explicit organizational goal, high-level strategy, or vision related to health equity. OCAs are currently underutilized and a critical step on the pathway to helping organizations develop concrete actions to improve health equity. OCAs assess the current state of an organization's health equity capacity, allowing for an organization to take stock of whether it is sufficiently prepared to successfully undertake equity-oriented work. OCAs provide a capacity baseline, which organizations can build upon to strengthen their capacity, where needed, to ensure they are well-equipped for health-equity practice.

Key Findings

Aim 1: Synthesize existing peer-reviewed and gray literature related to organizational health equity capacity assessments (OCA).

This aim involved conducting a scoping review (Chapter 2) to identify and characterize the OCAs that met the inclusion criteria at the time of research. Seventeen OCAs were ultimately included in the review, wherein their themes and focus areas,

intended audiences, and types of structures and approaches were synthesized and collated, to help health departments easily locate the most appropriate OCA for their needs. All identified OCAs assessed organizational health equity readiness and/or capacity across different metrics, but differed regarding length, scope, structure, and intended audience. Implementation evidence was found to be limited.

Aim 2: Understand the experience of implementing organizational health equity capacity assessments.

A comparative case study (Chapter 3) of two cases was conducted to expand the OCA implementation evidence base and provide useful lessons for other departments interested in assessing their capacity. The two health departments in the case study took different approaches to their assessments, including utilizing and adapting different assessment tools. The case studies were successful in illuminating both their shared and distinct implementation experiences. There were many commonalities regarding the factors that facilitated or hindered OCA implementation, which resulted in lessons learned related to OCA selection and adoption and the feasibility, acceptability, and cost of OCA implementation.

Aim 3: Understand the initial impact of implementing organizational health equity capacity assessments.

A white paper (Chapter 4) describing additional opportunities for health departments to leverage OCAs to achieve their health equity goals comprised the third paper of this dissertation. The white paper drew upon existing literature and research,

including the two case studies (Chapter 3), and other available relevant evidence to describe the documented and potential impacts of OCA implementation. For example, initial outcomes in the case studies included the development of departmental health equity strategic plans incorporating OCA findings. The white paper also identified longer-term uses of OCAs such as to ensure equitable pandemic preparedness efforts, develop organizational health equity capacity as part of the accreditation process, increase knowledge sharing across departments on health equity topics, and improve multi-sectoral collaboration to address health equity determinants.

Strengths and Limitations

This dissertation research has several strengths. The research fills a significant gap in knowledge regarding the implementation and impact of organizational health equity capacity assessments. The research included a robust search strategy that was developed in partnership with partner organizations, resulting in the first-ever synthesis of available OCAs from both the gray and peer-reviewed literature. Involving these partner organizations helped ensure that the research would meet the emerging needs of health equity implementers. The detailed case studies add new contributions to the implementation evidence base, and use three strategies to support credibility, dependability, and confirmability – using rich data, triangulating the interview data with the document data, and seeking respondent debriefing where possible to confirm findings.[1] Case studies can be rigorous and important contributions that bring unique perspectives into the field.[2] These case study findings will be relevant for similar

organizations and those working in similar contexts,[3] and will provide an important basis for future evidence generation and learning in this area. An additional strength of this research is bringing current organizational experience on this topic into the published literature.

This research also had some limitations. The scoping review is only current through March 2022, and the field of health equity practice is changing rapidly. The California Department of Public Health's OCA that was adapted by the Rhode Island Department of Health was published in May 2022 and thus not captured in our scoping review; though I have not come across any further examples of OCAs published after the scoping review, additional similar work may exist. Within the extant literature, publication bias remains a limitation, potentially influencing the articles available for inclusion. The implementation research, meanwhile, was reliant on the voluntary participation of key organizations, meaning our sample was limited to those with a vested interest in participation in the process, and was dependent on their OCA implementation timelines. Implementation of one case study was delayed due to reasons beyond our control, but ultimately the research was able to proceed as planned. Given the nature of the interviews, although the findings were anonymized, the participating staff members may have felt required to represent positive feedback on the OCA process, and recall bias and social desirability bias may have impacted the information provided during the key informant interviews.

Future Research

Future research in this space could help to advance the evidence base related to OCAs, which would help to encourage further OCA implementation and utilization. Remaining research gaps include the need to identify additional critical themes to include in new or adapted OCAs; to develop OCAs specific to the needs and contexts of different public health audiences, such as tribal health departments; to evaluate the long-term impact of OCA implementation, both to encourage uptake and to document the value and role of OCAs; and to understand how to incorporate expertise from other areas of practice, such as the organizational change/organizational development fields, to strengthen OCA implementation and impact. For example, it would be beneficial to conduct this type of research with other health departments with different characteristics, including tribal health departments and those representing different geographies, populations, and size, to continue to expand the implementation evidence base and ensure that relevant evidence exists to support OCA implementation in varying contexts.

Implications for Policy and Practice

This research is relevant to all organizations with health equity goals, not just U.S. public health organizations. The scoping review did not limit the geographical origin of the search results; however, the review of the literature found minimal evidence of OCA development or implementation in other countries. In 2010, there was interest in

this subject expressed by the European Union collaborative DETERMINE, which identified organizational development as a priority area for capacity building to address health inequities, but no related products or tools were identified.[4] The only included OCAs from outside of the United States were from Canada, where a conceptual framework and set of indicators were developed to identify and address "areas of weakness and barriers to organizational capacity" for public health equity action.[5,6] Yet OCAs could and should form a critical baseline component of global health practice for the local (country-based) organizations and regional bodies, bilateral and multilateral donors, and international non-governmental organizations (iNGOs) that fund and implement extensive public health programs many countries globally. Particularly given the lessons learned from the COVID-19 response,[7] it has become clear that increased health equity capacity is necessary in global health practice, both in long-term health investments – including a renewed focus on universal healthcare[8,9] – and within emergency responses to infectious diseases.[10] Activists and researchers have argued for new measures needed to achieve a more just post-COVID world, including policies and investments that address the social and structural determinants of health.[11] These shifting approaches toward centering health equity in global health practice would be enabled by internal organizational stock-taking, such as that facilitated by an OCA, to ensure sufficient capacity to support, implement and sustain equity-oriented global, country, and local initiatives and policies as the world looks toward a post-COVID future.

Similarly, non-public-health organizations would also benefit from OCA implementation. Though many of the OCAs included in the scoping review (Chapter 2) were intended for health organizations, the themes they commonly assess – such as

institutional leadership and governance, policies and guidelines, budget alignment and resource allocation, commitment and shared visions, internal structures, use of data, staff training/support, and staff diversity - are equally relevant for those working in complementary sectors. Though the Public Health 3.0 vision for a "new model of public health," with increased focus on social determinants of health in order to achieve health equity, focuses predominantly on the role of health departments, it is also widely recognized that social determinants are multi-sectoral in nature[12] and require collaboration with relevant non-health actors to begin addressing.

Critical next steps to advancing health equity practice, including remaining analytic gaps that could be filled by additional research, were described in the white paper. Key to advancing the field will be to widely disseminate the white paper so the recommendations can be considered and implemented by health equity practitioners and researchers. This dissertation provides some initial foundational evidence for the value of the OCA process, and implementation evidence to facilitate the implementation of OCAs by other public health organizations. The scoping review's publication in *Public Health Reports* has made these findings available to future researchers, and a second paper with the case study findings is underway. Meanwhile, findings have been shared with the two participating departments for their use, as they prepare for future iterations of their OCA implementation.

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CURRICULUM VITAE

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EDUCATION

Bloomberg School of Public Health, Johns Hopkins University, Baltimore, MD
DrPH, Health Equity and Social Justice (2023)
- Training in leadership and management of public health programs; data and policy analysis; philosophical bases and methodological issues in health equity; qualitative research and evaluation methods; and the design and implementation of interventions (programs, policies, and practice) to improve health equity and health outcomes.
- Dissertation: An Emerging Approach to Health Equity Practice: Exploring the Implementation of Organizational Health Equity Capacity Assessments

London School of Economics and Political Science, London, UK
MSc with Distinction in Health, Community and Development (2013)
- Training in community-led approaches to health equity; community health and development psychology; quantitative and qualitative research; health systems; and reproductive health
- Thesis: Health Access Barriers: Unexplored Psycho-Social Determinants for the Inequity in Maternal Health Outcomes in South Florida

Yale University, New Haven, CT
B.S. and B.A. with Distinction, double major in Psychology and Political Science (2011)
- Staff Editor, *Yale Journal for Public Health*
- Thesis: The Effects of U.S. Federal Policy on Maternal Mortality in the United States and Around the World

SELECTED HONORS AND AWARDS

- *USAID Meritorious Honor Award,* in recognition of outstanding service incorporating systems thinking into Bureau and Agency priorities.
- *USAID Superior Honor Award*, in recognition of exceptional technical leadership in demonstrating the critical importance of family planning in achieving the sustainable development goals.
- *USAID Meritorious Honor Award*, in recognition of the swift mobilization and development of a rapid response to the evolving, highly-visible public health needs brought on by the Zika virus.
- *Presidential Management Fellow* (2013-2015). Approximately 330 Fellows received USG civil service placements out of 12,200 applicants in 2013 (3%).
- *Franco Simone Memorial Fellowship Recipient* (Yale University) (2010).

SELECTED PUBLICATIONS AND PRESENTATIONS

- **Rachel Marcus**, Nidhi Monga Nakra, and Keshia M. Pollack Porter. (2023). Characterizing Organizational Health Equity Capacity Assessments for Public Health Organizations: A Scoping Review. Public Health Reports. DOI: 10.1177/00333549231151889
- Elizabeth Lugten, **Rachel Marcus**, Rhea Bright, Farzana Maruf, and Nazo Kureshy. (2023). From fragility to resilience: A systems approach to strengthen primary health care. Front Public Health. Jan 9;10:1073617. doi: 10.3389/fpubh.2022.1073617. PMID: 36699864; PMCID: PMC9868809.
- Rachel Deussom, Doris Mwarey, Mekdelawit Bayu, Sarah S. Abdullah, and **Rachel Marcus**. (2022). Systematic review of performance-enhancing health worker supervision approaches in low- and middle-income countries. *Hum Resour Health* **20**, 2. https://doi.org/10.1186/s12960-021-00692-y
- Charlotte E. Warren, Ben Bellows, **Rachel Marcus**, Jordan Downey, Sarah Kennedy and Nazo Kureshy (Eds). (2021). *Communities as the Cornerstone of Primary Health Care: Learning, Policy, and Practice. [Supplement].* Global Health: Science and Practice, March 2021, 9. https://www.ghspjournal.org/content/9/Supplement_1
- Charlotte E. Warren, Ben Bellows, **Rachel Marcus**, Jordan Downey, Sarah Kennedy and Nazo Kureshy. (2021). *Strength in Diversity: Integrating Community in Primary Health Care to Advance Universal Health Coverage.* Global Health: Science and Practice, March 2021, 9 (Supplement 1): S1-S5; https://doi.org/10.9745/GHSP-D-21-00125.
- **Rachel Marcus**, Chiara Bercu, Maureen Norton, and Clive Mutunga. (2019). *Improving the Evidence for Integrated Family Planning and Economic Growth Programming: a synthesis of the evidence.* Gates Open Res 2019, 3:1497. https://doi.org/10.12688/gatesopenres.12994.1.
- **Rachel Marcus** and Chiara Bercu. (2018). "Integrating Family Planning and Economic Growth: What Does the Evidence Show?" (Poster, International Conference on Family Planning).
- Ellen Starbird, Maureen Norton, and **Rachel Marcus** (2016). *Investing in Family Planning: Key to Achieving the Sustainable Development Goals.* Global Health: Science and Practice, 4 (2) 191-210; DOI**:** 10.9745/GHSP-D-15-00374
- *Reviewer*, Journal of Health Care for the Poor and Underserved (2017-present).

TEACHING EXPERIENCE

Johns Hopkins University, Baltimore, MD.
Teaching Academy Certificate of Completion (March 2022)
- Included additional coursework to strengthen understanding of pedagogy and explore different educational models (Phase 1). Immersion teaching-related experiences (Phases 2 and 3) supported acquisition of concrete teaching and assessment skills, including working with faculty teaching mentors to strengthen instructional skills including through developing course and/or unit learning objectives, selecting and implementing formative and summative assessment plans, and implementing instruction.

Johns Hopkins Bloomberg School of Public Health, Baltimore, MD.
Graduate Teaching Assistant, Health Impact Assessments (January – March 2022)
- Led LiveTalk teaching sessions and break-out groups for student discussion. Graded student papers and exams.

Johns Hopkins Bloomberg School of Public Health, Baltimore, MD.
Graduate Teaching Assistant, Conceptual and Evidential Foundations of Health Equity (Winter Institute 2021)
- Led student discussion groups, graded student papers, organized and maintained course materials.

U.S. Agency for International Development, Washington DC
*Course Developer and Instructor, Health System Strengthening Flagship Course (*ongoing annually)
- Developed original course content, syllabus, and overall teaching approach. Developed and continue to teach modules on key topics including health equity, social and behavior change, and monitoring, evaluation, and research.
- Taught the course in-person and then migrated to an online format with both synchronous and asynchronous content.

U.S. Agency for International Development, Washington DC
Course Developer and Instructor, Family Planning and Reproductive Health Flagship Course (2018)
- Developed original course content, syllabus, and overall teaching approach. Developed and taught modules on key topics including policy approaches to family planning and reproductive health (FP/RH), improving FP/RH knowledge management, and implementing multi-sectoral approaches within FP/RH programs.

RELEVANT PROFESSIONAL PUBLIC HEALTH EXPERIENCE

U.S. Agency for International Development, Washington, DC
Senior Advisor, Office of Health Systems, Bureau for Global Health (March 2019 – present)
- Provide Agency-wide leadership in health system strengthening (HSS), including:
  - Serve as Team Lead for the Strategic Support and Analysis team, managing a team of technical advisors working on cross-cutting HSS topics.
  - Manage Agency implementation of the new Congressional HSS directive. Responsible for ensuring 52 Operating Units across the world meet Congressional requirements annually through improved implementation and monitoring of integrated HSS programming. Coordinate across the inter-agency to implement the directive. Lead relevant Congressional reporting and briefings.
  - Lead the implementation of the Agency's HSS Learning Agenda with the goal of improving the quality of HSS programming, including identifying and prioritizing multi-year learning-questions based on evidence gap analysis, developing activities for evidence generation, synthesis and dissemination, and providing technical assistance to relevant field activities.
  - Co-develop and co-instruct the Agency's flagship HSS course, reaching dozens of USAID staff in Washington and field Missions.

- o Co-author of the Agency's Vision for Health System Strengthening 2030, particularly in the sections related to monitoring, evaluation, research and learning; health equity; social and behavior change; and community engagement. Provide leadership in designing key program activities and providing technical assistance to colleagues integrating HSS approaches more strategically into USAID's global health systems portfolio.
    - o Represent USAID in global technical forums and collaboratives related to HSS.
- Serve as Agreement Officer's Representative for USAID's global flagship projects, including Digital Square ($170M) and the Consolidated Grants to the World Health Organization ($400M). Responsible for oversight and management of the portfolios across up to 65 countries. Lead teams of technical and management advisors. Contribute to drafting of US Government positions on key WHO mandates, proposals, responses, etc.

U.S. Agency for International Development, Washington, DC
Public Health Advisor, Office of Population and Reproductive Health, Bureau for Global Health (September 2013 – March 2019)
- Managed a $150 million global portfolio within PRH's Policy, Evaluation, and Communication Division, including USAID's global health flagship projects in knowledge management, census and survey data, and social and behavior change, to improve health and development outcomes.
- Supported rapid development of the family planning and reproductive health (FP/RH) components of USAID's Zika response in 2015-2016. Provided technical FP/RH guidance during implementation of the Zika response.
- Led working group to advance development programming through multi-sectoral integrated activities. Supported USAID Missions in integrating emerging evidence into design and management of integrated activities.
- Supported increased synthesis, dissemination, and uptake of state-of-the-art knowledge and approaches in health policy and programs through high-quality learning agendas and knowledge management. Oversaw approaches, platforms, and tools to improve the dissemination and utilization of emerging evidence across health technical areas.
- As a member of the Women@AID policy committee, contributed to Agency policy reform initiatives and coordinated mentorship opportunities.
- Served as a Presidential Management Fellow (PMF) from 2013-2015. The PMF program is the government's flagship leadership development program and provides leadership training and developmental assignments to PMF civil service appointees in addition to regular duties. Elected to the State-USAID PMF Advisory Council and represented needs of USAID PMFs to USAID and State leadership.

Administration for Children and Families, Department of Health and Human Services, Washington, DC
Special Assistant to the Assistant Secretary (June – October 2014)
- Detailed to the Administration for Children and Families (ACF). Oversaw a wide-ranging portfolio of programs and offices on behalf of the Acting Assistant Secretary, including the Office of Early Child Development, Office of Refugee Resettlement, Family and Youth Services Bureau, Children's Bureau, Office of Planning, Research and Evaluation, and Office on Trafficking in Persons.
    - o Provided oral and written advice to the Acting Assistant Secretary (AAS) and Chief of Staff (CoS), briefed ACF officials on behalf of the AAS and CoS, responded to inquiries from other Federal agencies and the public, and

supported the AAS and CoS in their interactions with internal and external stakeholders.
- o Collaborated with the Chief Medical Officer to create stronger links between HHS health programs and ACF's human service programs to advance health equity and reduce poverty by addressing social and financial barriers to health.
- o Coordinated initiatives relating to and on behalf of Immediate Office of the Assistant Secretary (IOAS). Assisted in building relationships and working on cross-cutting health and human systems policies within ACF and HHS, and with other Federal agencies.

Marie Stopes International, London, UK
Consultant (2013)
- Conducted global, regional, channel-specific, and country-specific analyses of annual data sets on sexual and reproductive health programs in thirty MSI country programs. Identified and presented disparities in service access and client feedback.

Global Health Corps, New York, NY
Leadership and Organizational Development (2012)
- Supported placement of 90 fellows from 12 countries with 34 partner organizations in the U.S., Burundi, Malawi, Rwanda, Uganda, and Zambia. These placements mobilized a community of emerging leaders to develop innovative approaches to advance health equity, and brought skill sets from other sectors into global health.
- Supported training of fellows in global health practice and leadership.
- Improved efficiency by creating a grant library and systems for donation processing. Coordinated fundraising campaigns and events, and managed correspondence with donors and partners.

National Student Partnerships (NSP), New Haven, CT
Site Director of New Haven Branch (December 2007 – May 2009)
- Head of Community Partnerships: developed relationships with other CT nonprofits and service organizations to better serve marginalized and vulnerable social service clients and widen client base. Maintained relationship with national Washington, D.C. headquarters.
- Transition Leader: created new non-profit (No Closed Doors) to continue providing services to hundreds of clients when NSP branch was threatened with closure by national office.
- Client Service Provider: assisted clients in accessing housing, employment, and health services.

ADDITIONAL INFORMATION:

Recent Training: Innovative Program Design Methodologies, Health Project Management, Health Financing, Program Monitoring and Evaluation, Programming Foreign Assistance, and USAID's Intensive Leadership Course. Culture of Leadership participant, first cohort.
Languages: English (fluent) and Spanish (proficient).