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The Future of Community Health Center Executive Leadership A Mixed-Method Formative Evaluation

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Approval of the Dissertation Committee

This dissertation has been duly read, reviewed, and critiqued by the Committee listed below, which hereby approves the manuscript of Lizbeth Bayardo Cardenas as fulfilling the scope and quality requirements for meriting the degree of Doctor of Public Health with a concentration in Leadership & Management.

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Abstract

The Future of Community Health Center Executive Leadership:
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This is a formative evaluation study of the California Primary Care Association's (CPCA) Leadership Equity Program, developed in response to the need for greater alignment between the communities accessing care provided by Community Health Centers and the representativeness of their future executive leaders. Community Health Centers (CHC) are a critical network of primary healthcare systems that deliver high-quality, comprehensive healthcare services to patients predominantly from under-resourced and marginalized communities of color.

The study used a mixed-method concurrent triangulation design to describe how participants perceived the program achieved its goals and objectives using Kirkpatrick's Model and systems thinking. The study integrated quantitative data collected from retrospective pre-post surveys and qualitative data collected using the Most Significant Change (MSC) technique.

Findings demonstrated that the Leadership Equity Program successfully reached its immediate goals and objectives in the first year of implementation to impact change at the individual level and build capacity at the organizational, community, and system levels. This study identified barriers and opportunities for this program to catalyze collective and collaborative leadership to advance Justice, Equity, Diversity, and Inclusion (JEDI) in CHC organizations and communities. The findings extend the leadership literature on how equity-grounded leadership development programs can advance diverse leaders who can create and sustain environments that advance health equity.

Dedication

I dedicate this dissertation to the loving memory of my dad, Mario Bayardo, who instilled in me the importance of living a life of integrity and purpose and inspired me to pursue higher education in public health.

A special thank you to all the strong women who love me unconditionally - especially my mom, Catalina, for being my rock and role model, without which I would not be where I am today. And my sisters, Gaby, Brenda, and Alejandra, thank you for giving me the love and support only sisters can.

To my husband Esiquio, thank you for being my partner in life, my love, my coach, my listener, and a supporter of all my endeavors. And to our daughter, Amelina – my sweet girl, you have been my source of inspiration to finish strong, and I hope you always remember all your dreams and goals are possible.

To my dear friend and fourth sister, Arlyn, thank you for always believing in me, cheering me on, and walking alongside me throughout my many life chapters. And to all my family, friends, and colleagues, thank you for uplifting me throughout my journey.

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To my CPCA and LEP colleagues, including Val Sheehan and LaSonja Hill, thank you for being thought partners and supporting me as I entered motherhood. To our wonderful consultants and LEP partners from Wellbeing and Equity (WE) in the World and Mmapeu Consulting - Soma, Diane, Kirsten, Kelley, Yolanda, Lena, Samantha, Claudia, Cianna, Mey, Seth, and Adeeba, thank you for your immense collective dedication and wisdom towards developing the Leadership Equity Program. Thank you to all LEP cohort participants and supporters for your passion and commitment to advancing JEDI and our collective vision and impact.

I want to thank Cindy Delgado, who has been my right-hand and accountability partner throughout our DrPH journey; thank you for the countless hours you spent brainstorming with me and supporting me with data coding and analysis.

Thank you to all my supporters and sponsors - especially the California Primary Care Association, Gates Millennium Scholars Program, Preparing Future Faculty, and School of Community and Global Health.

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List of Abbreviations

BIPOC - Black, Indigenous, and People of Color

CHC - Community Health Centers

CLI - Clinic Leadership Institute

CPCA - California Primary Care Association

DEI - Diversity, Equity, and Inclusion

FQHC - Federally Qualified Health Center

HRSA - Health Resources and Services Administration

JEDI - Justice, Equity, Diversity, and Inclusion

LEP - Leadership Equity Program

MSC - Most Significant Change

MUA - Medically Underserved Area

MUP - Medically Underserved Population

NACHC - National Association of Community Health Centers

PHSA - Public Health Service Act

RAC - Regional Associations of California

RHC - Rural Health Clinic

SODH - Social Determinates of Health

Glossary

Alternative Payment Model (APM) - is a payment approach that deviates from traditional fee-for-service model and gives added incentive payments to provide high-quality and cost-efficient care.

Black, Indigenous, and People of Color (BIPOC) - A term that centers on the experiences of Black and Indigenous groups and demonstrates solidarity between communities of color. Black is a racialized classification of people with a mid to dark brown complexion. Indigenous refers to ethnic groups that are native to the Americas. People of color refer to non-white people, especially as they face racism and oppression from white supremacy.

California Advancing and Innovating Medi-Cal (CalAIM) - Is a multiyear initiative, by the Department of Health Care Services (DHCS) to improve the quality of life and health outcomes of the Medi-Cal population.

Community Health Center - A community-based and patient-directed organization that serves populations with limited healthcare access. Health Center is a non-specific term that can include a health center look-alike or an FQHC.

C-Suite - Describes an organization's highest level senior executives who tend to start with the letter C for "chief." For example, Chief Executive Officer (CEO), Chief Financial Officer (CFO), Chief Operating Officer (COO), and Chief Information Officer (CIO).

Diversity - A quantitative representation measure that describes various racial identities or characteristics.

Equity - Equity is the result of removing barriers, of inclusive practices that create access and opportunity for a diverse range of individuals in any social space. Equity demands that we first recognize systemic barriers.

Inclusion - A qualitative measure of representation and participation that ensures full access, authentic and empowered representation and participation, true belonging, and power-sharing.

Federally Qualified Health Center (FQHC) -An outpatient clinic system that qualifies for specific reimbursement under Medicare and Medicaid and can include FHC look-alikes and outpatient clinics associated with tribal organizations.

FQHC Look Alike - An organization that meets all of the eligibility requirements of an FQHC that receives a PHS Section 330 grant but does not receive grant funding.

Most Significant Change (MSC) – A participatory monitoring and evaluation technique involves collecting and selecting stories of change produced by a program or project. MSC can be used in programs where it is not possible to predict desired changes precisely or set pre-defined indicators of change.

Place-based - An equitable approach to building healthy communities that involve the community and stakeholders. Place is characterized by structural resources such as schools, hospitals, recreational facilities, places of worship, and housing.

Racial equity- A process of eliminating racial disparities and improving outcomes for everyone by changing policies, practices, systems, and structures and prioritizing measurable change for people of color.

Racial Justice - Involves eliminating racial hierarchies and systemic racism where Black, Indigenous, and People of Color, in particular, have equitable access to resources, power, and self-determination to thrive.

Rural Health Clinic (RHC) – A public, nonprofit, or for-profit healthcare facility that is intended to increase access to primary care services for patients in rural communities. To receive certification, the RHC must be located in a rural, under-resourced area.

Regional Associations of California (RAC) – A statewide coalition of regional clinic networks (aka Consortia) which represent community health centers (CHCs) at the local level and provide a regional clinic voice.

Safety-net - Defined by the Institute of Medicine (IOM) as "those providers that organize and deliver a significant level of health care and other needed services to uninsured, Medicaid and other vulnerable patients."

Social Determinants of Health - The conditions in the environments where people live, learn, work, play, and worship, which affect health, well-being, and quality-of-life outcomes.

Socio-ecological framework - The socio-ecological framework is a multi-level conceptualization of health that includes intrapersonal, interpersonal, organizational, environmental, and public policy factors.

Systems change - Is generally understood to require change or transformation in the policies, practices, power dynamics, social norms, or mindsets that underlie a societal issue at stake.

Systems theory - The interdisciplinary study of systems, which are groups of interrelated, interdependent parts bounded by space and time, influenced by the environment, defined by their structure and purpose, and expressed through functioning.

Systems thinking - Is used to explore and develop effective action in complex contexts by making sense of the world's complexity by looking at it in terms of wholes and relationships rather than by the part.

Tribal or Urban Indian Health Centers – Are designated Federally Qualified Health Centers that provide comprehensive primary care and services to American Indians and Alaska Native.

I. Chapter 1: Introduction

Community Health Centers (CHC) emerged from the Civil Rights movement in the 1960s founded on the belief that everyone deserves access to affordable community- and patient-driven health care. American physician and civil rights activist Dr. Jack Geiger inspired the community health center model, an idea he had seen used to address the health care disparities in apartheid South Africa to the structural racism African Americans experienced in accessing quality health care. This led to the first CHCs established by healthcare pioneers with funding from the Federal Office of Economic Opportunity in response to President Lyndon B. Johnson's major War on Poverty initiative (*RCHN Community Health Foundation*, 2022).

Since the 1960s, CHCs have continued to be a critical health care delivery system for patients and communities across the United States. The role of CHCs grew with the passage of the Affordable Care Act in 2010 and the expansion of access to Medicaid, which doubled the number of patients served by 2016 (*National Association of Community Health Centers, Inc*, 2020). With the growth and expansion of community health centers, more attention was paid to the need for an expanded leadership pool to lead these unique systems of care. In the early 2000s, studies predicted that tenured non-profit leaders across many sectors, including those in the CHC sector, were preparing to transition out of their roles, creating gaps in the leadership pipeline. The studies reported a limited number of "next-generation leaders" who were ready and eager to accept senior leadership positions (Cornelius et al., n.d., 2005; Grinnell & Unrau, 2005). In 2008, a summary report titled *Community Clinic Leadership in California: The State of the Field & Implications for the Future* revealed gaps and needs for leadership at CHCs, particularly

for emerging leaders, which laid the groundwork for developing the Clinic Leadership Institute (CLI) Emerging Leaders Program in 2008.

The Clinic Leadership Institute (CLI) Emerging Leaders Program provided professional development for ten years. The final CLI cohort graduated in June 2018 and overall, the program equipped 258 individuals to serve in leadership roles at community health centers and similar organizations. After the program's sunsetting in 2018, a study spanning the 10 CLI cohorts provided recommendations for further investments in leadership development for CHC leaders. This study published a report in 2021 titled *Investing in Leadership Development: A Tool for Systems Change in the Community Health Center Field,* which reported that continued investment in leadership was needed to support further systemic change, particularly among groups who were historically or structurally discouraged or had limited access to traditional and positional leadership roles (Arnold et al., 2021). The evaluation studies from the Clinic Leadership Institute (CLI) provided an important foundation for developing the Leadership Equity Program in 2021 (Arnold et al., 2021; Howard & Dube, 2009; *Leadership Equity Program*, 2021). Additionally, the sunsetting of the Clinic Leadership Institute (CLI) created a clear gap in health center-specific leadership development training and a timely and unique opportunity to reexamine and reframe the importance of leadership development, justice, equity, diversity, and inclusion.

The continued need for leadership training for California's CHCs and the current and expected leadership turnover served as an impetus for developing the Leadership Equity Program. The Leadership Equity Program builds on findings and recommendations from leadership development efforts that call for a need to develop leaders who can lead with the social justice and community values of CHCs, while also embracing the challenges and

opportunities of a rapidly changing health care field (Arnold et al., 2021; Bor et al., 2017; Dave et al., 2021; Howard et al., 2011). In addition to recruiting more diverse leaders, the Leadership Equity Program seeks to address an increasingly profound need to foster racial equity skills and mindsets for working with complexity to address health and well-being inequities. The program aims to build a pipeline of community health center leaders with the skills, networks, and lived experiences that support them working alongside communities — particularly those from historically under-resourced communities who have faced structural and systemic oppression.

The Leadership Equity Program

The California Primary Care Association (CPCA) conceptualized the Leadership Equity Program (LEP) in 2021 as a cohort-based leadership program to train future executive and C-suite CHC leaders (*Leadership Equity Program*, 2021). CPCA is a member-driven association representing more than 1,300 not-for-profit Community Health Centers. The program aims to create a new cadre of community health center leaders to advance capacity at the individual, organizational, community, and political system levels to improve the health and well-being of California communities. The Leadership Equity Program takes a place-based approach that recognizes the diversity of California's communities and builds participants' leadership skills and networks to drive health equity.

The inaugural LEP cohort launched in 2022 was designed to engage participants in dynamic leadership training, including interactive three in-person, 16 virtual sessions, six executive coaching sessions, peer-to-peer learning, and a capstone project. Additionally, the capacity-building components of the program was designed to support participating CHCs executive teams to advance emerging C-suite leaders and expand organizational innovations and

place-based strategies centered on justice, equity, diversity and inclusion. The LEP curriculum for cohort 1 was comprised of the following areas:

- **Anti-racism & Racial Equity** - Participants became familiar with race equity theory & history; examined current trends and impact on healthcare models and delivery; explored implications of implicit biases and structural racism and strengthened their capacity to implement anti-racist policies and practices to mitigate racial health inequities.
- **Leadership Development** - Participants recognized the core tenets of inclusive and adaptive leadership, examined personal biases; identified key traits of an effective leader; discussed opportunities to drive leadership in policy, advocacy, and coalition building; and explored the importance of engaging authentically to drive change and create an organizational culture of inclusion and belonging.
- **Community Well-being** - Participants developed a capstone project that addressed their organizational and community needs and leadership goals; applied their learning and understanding of using data, policies, and community voice for leadership decision-making; and developed a balanced strategy to address equity and advance well-being for their surrounding communities.
- **Health Center Operations** - Participants developed leadership skills in human resources, operations, health information technology, and finance and payment reform to advance innovation and person-centered-, value-based-and population-based approaches to care delivery, centered on the values of the community health center movement and the principals of justice, and equity, diversity, and inclusion.

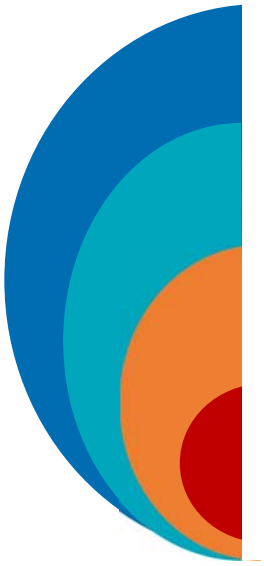
The Leadership Equity Program takes a system change approach to consider change beyond the individual and organizational level and considers systemic structural changes necessary to

improve the social determinants of health for the communities were community health centers are located. The program emphasizes place-based leadership to address structural racism manifestations that require mobilizing leaders who have a deep understanding of the history, politics, local institutions, and economy within a specific community (Dankwa-Mullan & Pérez-Stable, 2016).

The program's curriculum design is informed by literature identifying the root causes of health inequities as described by the National Academies of Sciences, Engineering, and Medicine Report, Communities in Action: Pathways to Health Equity (2017). The report identifies two main groups as root causes of health inequity (Weinstein et al., 2017). The first root cause is intrapersonal, interpersonal, institutional, and systemic mechanisms, which organize the distribution of power and resources differentially across race, gender, class, sexual orientation, and other individual and group identity dimensions. The second root cause of health inequity is the unequal allocation of power and resources, which manifests in unequal social, economic, and environmental conditions, also known as the social determinant of health (SDOH) (Weinstein et al., 2017).

The LEP vision for leadership development is to support systems change by building capacity and competencies at multiple levels of the socio-ecological model depicted in *Figure 1*, described as individual leadership capacity, organizational capacity, community well-being, and political and systemic. This model was developed within the Leadership Equity Program as a new framework to organize the programs thinking on producing change at the individual, organizational, community and political and structural level. This model builds from the social ecological model which is framework widely employed in public health research and practice (Dave et al., 2021; Gellman & Turner, 2013a; Golden et al., 2015).The model's core supports

emerging leaders as change agents who can undo racial health inequities, manage change, develop place-based solutions, and address health and racial iniquities along the socio-ecological dimensions described in *Figure 1*.



Political and Systemic: Influence policies and systemic changes that advance equity and improve health outcomes for communities of color.

Community Well-Being: Advance community well-being through place-based leadership and community-based partnerships for collective action to mitigate racial health inequities.

Organizational Capacity: Strengthen CHC's capacity to recruit, retain and advance diverse leaders and expand organizational policies and practices centered on anti-racism, equity, and community well-being.

Individual Leadership Capacity: Develop emerging CHC C-suite leaders' awareness, knowledge, and skills to champion anti-racism, racial equity, and well-being within CHC leadership roles and CHC operations.

Figure 1. Leadership Equity Program's Socio-Ecological Approach

Problem Statement

Since the Leadership Equity Program is still early in its formation, it was unknown to what degree it was implemented as planned and whether participants perceived the program achieved its objectives. This study addressed this problem using a mixed-methods formative evaluation to gather valuable program and participant data to measure changes resulting from the program's implementation in its first year and also consideration to continue measuring the program's long-term impact.

This study aimed to address some of the challenges leadership development programs have in evaluating changes catalyzed at multiple system levels, including the organization and communities in which participants lead (Dave et al., 2021). A 2018 report found that only 24%

of organizations utilize some form of impact measurement of their leadership programs and that the most common tool is satisfaction surveys (Clark, 2018; Dave et al., 2021). Additionally, according to one study, only half of the training programs are evaluated for behavioral outcomes, and less than one-third are evaluated for results (Twitchell et al., 2008).

There are several reasons for gaps in evaluating leadership training programs. Some cited reasons include challenges identifying and measuring outcomes, difficulty identifying control groups, attribution errors, self-report bias, and confounding variables (Dvir et al., 2002; Frese et al., 2003; Malling et al., 2009; Packard & Jones, 2015; Twitchell et al., 2008). Some programs lack the financial resources, time, and prioritization, required to engage in evaluation activities (Kirkpatrick & Kirkpatrick, 2016; Wang Taherdoost& Wilcox, 2006). Leadership training programs may also not undergo rigorous evaluation because there may be a lack of expertise in evaluation techniques (Twitchell et al., 2008; Wang & Wilcox, 2006). For example, rigorous evaluation studies that make causal claims about training may use randomized, double-blind treatment and control group methods. Such methods require complex methods, and statistical manipulations may be too difficult, time-intensive, impractical, and costly (Brinkerhoff, 2010).

Purpose of the Study

A mixed-methods formative evaluation of the Leadership Equity Program was used to understand the formation of this equity-grounded leadership development program and lay the foundation for continued program evaluation across multiple systems. This evaluation used Kirkpatrick's evaluation model and most significant change technique to inform the program of what factors led to training success and how training could continue to be evaluated beyond a

formative evaluation. This evaluation study was centered around the following aims and research questions.

Study Aims

- Describe the extent participants perceived the program achieved its objectives using Kirkpatrick's four levels of evaluation and Most Significant Change (MSC) technique.
- Explore ways the program can continue to be evaluated beyond a formative evaluation to understand the program's impact across multiple systems.

Research Questions

1. What were LEP participants' reactions to the program regarding satisfaction, relevance, and utility?
2. Did LEP participants experience increased knowledge and skills due to their participation in the program?
3. What were the most significant changes (MSC) that LEP participants experienced due to their participation in the program?
4. What were barriers to change that LEP participants experienced during their participation in the program?

Methodology Design and Rationale

The research study consisted of 16 cohort participants selected to participate in the Leadership Equity Program. LEP cohort participants represented a range of racial and ethnic groups (e.g., Hispanic or Latinx, African American or Black, Asian Americans and Pacific Islanders), disciplines (e.g., medicine, nursing, public health, behavioral health, health

technology, health administration), and positions (e.g., Director, Deputy Director, Assistant Chief). The selection criteria used were that the participant was currently in mid-level management or supervisory role and was employed in a CHC in California or by a regional CHC consortium. The participants also needed to be nominated by an executive team member as someone who the organization envisioned would ascend into an executive leadership role within 1-5 years (e.g., Chief Executive Officer, Chief Medical Officer, Chief Operations Officer, Chief Information Officer). Further data regarding the sample composition and demographics are described in *Chapter 3 – Methodology*.

The program used a formative evaluation approach informed by *Evaluating System Change: A Planning Guide* which describes the purpose of this evaluation aligning with the current needs program, which is to improve the operation, implementation, or design of this program while in the early development (Hargreaves, n.d.). Given the program's systemic approach, this study utilized systems thinking to support the program in understanding the dynamic connections, relationships, and patterns observed in the program. (Hargreaves, 2014; Trochim et al., 2006). As a program aiming to impact system change, this study utilized systems thinking to provide a more robust understanding of the impacts of this equity-grounded leadership development program across multiple systems (Hargreaves, 2014; Leischow et al., 2008; Wheatley, 2000).

This study replicated some aspects of the evaluation design of the Clinical Scholars Program, a national three-year, multidimensional leadership development program created for mid-career clinicians funded by the Robert Wood Johnson Foundation. The Leadership Equity Program (LEP) is similar to the Clinical Scholars Program (CLI) in that both focus on developing diverse healthcare leaders to act as catalysts to address social determinants of health

and advance health equity. Both programs recognize that individual participants work in multiple dynamic systems shaped by their team environment, community environment, and political systems (Dave et al., 2021; Fernandez & Corbie-Smith, 2021). The evaluation design for this study mirrors the theory and conceptual framework of the Clinical Scholars Program to measure program-attributable changes utilizing the Kirkpatrick Four-Level Training Evaluation Model and Most Significant Change (MSC) methodology, both utilized by the Clinical Scholars National Leadership Institute (CNLI) and described in the following paragraphs (Dave et al., 2021).

The study was guided by Kirkpatrick's Four-Level Training Evaluation Model (Kirkpatrick's Model) to evaluate the Leadership Equity Program. Level one of Kirkpatrick's Model is reaction, which measures the participants' satisfaction with the program and is most often assessed using reaction surveys. Level two is learning, which assesses participants' changes in attitudes, knowledge, and skills due to the program, usually through some form of pre-post assessment. Level three is behavior which involves evaluating changes in participants' behavior due to the training, generally using a qualitative method. Level four focuses on understanding the organizational results from the program and is often evaluated several months or years after the program. Although level four was not assessed in this study since results are expected to occur beyond the study's timeline, the study provided recommendations to assess this level. We have defined each level for the Leadership Equity Program evaluation as illustrated in *Figure 3*.

- Level 1: Reaction assessed how LEP participants rated their experience of all program components regarding satisfaction, relevance, and utility using survey data.
- Level 2: Learning assessed LEP participants' self-report of gains in knowledge and skills resulting from participation in the Leadership Equity Program using survey data.

- Level 3: Behavior assessed LEP participants' reports of explicit behaviors due to the knowledge and skills obtained through participation in the Leadership Equity Program measured using the Most Significant Change Technique.
- Level 4: Results were not assessed given the data collection timeline in which results were not expected to be measured. *Chapter 5 - Findings and Recommendations* proposes methodology to continue analyzing the program results.

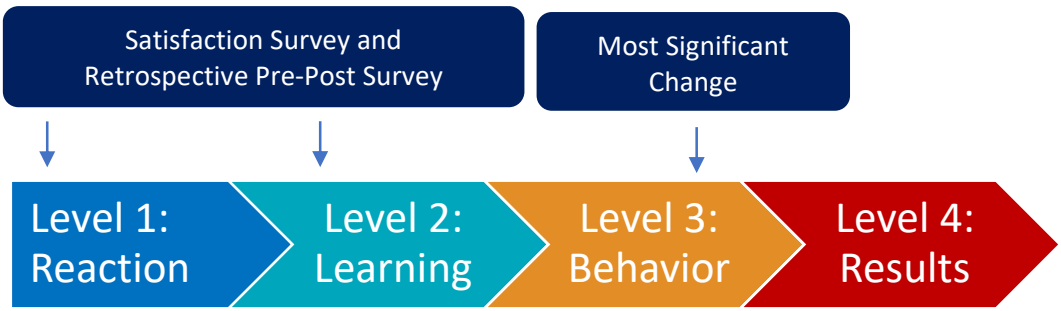


Figure 2. Evaluation Methodology of the Leadership Equity Program Using Kirkpatrick's Evaluation Model

Data Analysis and Synthesis Approach

The study used a mixed-method concurrent triangulation design to integrate quantitative data collected in the surveys and qualitative program data collected using the Most Significant Change (MSC) technique. Data was organized and analyzed as either a quantitative or qualitative dataset. Quantitative data was analyzed using SPSS, a statistical analysis software. Qualitative data was transcribed, coded, and analyzed through inductive thematic analysis using ATLAS.ti, a qualitative research tool that is used for coding and analyzing various forms of qualitative data. Thematic analysis was selected as a method of "identifying, analyzing, and reporting patterns (themes) within data" (Braun & Clarke, 2006; Castleberry & Nolen, 2018). Thematic analysis is

a common form of qualitative data analysis done using ATLAS.ti, which involves the identification of themes and patterns that appear in otherwise unstructured qualitative data. Thematic analysis requires the researcher to review and organize the data, summarize it by tagging specific sentences or sections with codes, and further classify the codes by grouping them into themes (Soratto et al., 2020).

Data coding and analysis for both datasets were aligned with the research questions. Quantitative and qualitative findings were integrated collaboratively using methodological triangulation for final synthesis and interpretation. Participant data is reported in aggregate form to maintain anonymity. The finding summaries underwent an iterative review process to identify the most salient findings from all data sources to focus on and refine key results.

Significance of the Study

The study of leadership training is significant as an essential part of developing talent for many workforce sectors, including health care and public health. There is a higher demand for leadership training as the COVID-19 pandemic, and anti-racist uprisings have heightened awareness of the need for leaders who can work in partnership with the community to address systemic and racial inequities (Arnold et al., 2021; Chowkwanyun & Reed, 2020). There is also a need for developing emerging leaders who can advocate against systemic racism and lead their organizations through an increasingly complex healthcare system to meet the needs of their diverse patient populations and communities. This study is important to evaluate how the Leadership Equity Program addresses these needs and supports the development of diverse leaders within California's CHCs.

This study supports the continued implementation of the Leadership Equity Program and understanding of how leadership development training can best equip future community health center leaders to advance health equity and well-being. While there is a need to measure leadership development programs that address complex leadership challenges, there is also a need to make evaluation plans more robust and comprehensive (Dave et al., 2021; Reinelt et al., 2003). As reflected in the literature, leadership training programs face challenges in meaningfully measuring program outcomes, particularly for complex, multi-level, and multi-dimensional programs (Dave et al., 2021; Hannum et al., 2017; Hargreaves, n.d.). This study aims to address the challenges in evaluating a complex leadership development program using mixed methods techniques and conceptual frameworks that have been effective for similar leadership development programs.

This study aims to provide a well-rounded picture of longer-term outcomes and possible impacts of LEP's training efforts by applying best practices for gathering valuable outcome data to evaluate this multi-level leadership development program. Given the program's novel and innovative approach to combining leadership and justice, equity, diversity, and inclusion training, this study applied a formative evaluation approach to learn as the program unfolds.

This evaluation informs the rationale behind such changes as CPCA continues to refine the program design to ensure the program is positioned to reach its goal of equipping community health centers leaders who can act as change agents to address racism as a root cause of inequity for Black, Indigenous, and People of Color (BIPOC). Results from this study will be communicated to all stakeholders, including past and prospective program participants. Findings will benefit the broader healthcare, community health, and leadership development field.

II. Chapter 2: Literature Review

This literature review is divided into three core portions. The first portion consists of understanding the origin and development of the community health center model rooted in the civil rights movement, the current community health center landscape, the impact of COVID-19 on CHCs, and the need to prepare leaders who can lead in complex and dynamic systems of care. The second portion reviewed the literature on leadership development as supported by adult learning theory, what constitutes leadership development program participants, and current and emerging skills and capacities needed in leadership development programs. This portion also reviewed the literature on how leadership development has been evaluated using system theory and systems thinking and understanding systems change evaluation design approaches. The third portion examined program and evaluation documents of two key programs similar to the Leadership Equity Program and internal documents on a needs assessment that informed the formation and development of LEP.

A narrative literature review was used to gather and examine the literature on community health centers, community health center leadership, leadership development programs, and evaluation of leadership development and training. A narrative literature review was chosen to define concepts, review theories, and analyze related issues (Green et al., 2006). The scope of literature was limited by giving preference to (a) articles published in the last fifteen years, (b) topics related to systems evaluation and executive leadership development of healthcare professionals (c) issues relating to community health centers. Preference was also given to peer-reviewed articles, but it was not a delimiting factor, given the limited amount of literature and the novel nature of this topic. A narrative literature review was done using PubMed, JSTOR, and Google Scholar. Databases were selected for their inclusion of health and transdisciplinary

articles. Keywords used were "leadership" AND "community health center," "evaluation AND leadership," "leadership AND development AND evaluation," and "leadership AND system change." Articles were included if they were focused on leadership development and/or evaluation and/or systems change and/or community health centers.

A document review was done of both internal and external program documents such as reports, program logs, performance ratings, funding proposals, meeting minutes, newsletters, and marketing materials housed within the California Primary Care Association's (CPCA) internal files. As noted by the Centers for Disease Control and Prevention (CDC), document review is a way of collecting data by reviewing existing documents. The data gathered provides background information about the program being evaluated to understand the history and operation and inform the use of other data collection tools for evaluation (Centers for Disease Control and Prevention, 2018).

The Community Health Center Movement

Before understanding the Community Health Center (CHC) model and landscape, it is important to understand the shared mission of community health centers beginning with the Community Health Center Movement. Community Health Centers came into existence over five decades ago and are rooted in the Civil Rights Movement.

During this time, health care was not easily accessible to Black, Indigenous, People of Color (BIPOC), particularly Black Americans. Black community members were openly discriminated against in poorly funded hospitals and clinics in the rural South and urban communities, leaving Black communities with poor access to good health and little or no access to medical services (Morabia, 2016). These issues were rooted in systemic racism, and civil

rights activists across the country began to form alliances to address these issues. This included civil rights leaders from the Black Panther Party, who opened 13 free health clinics across the country known as People's Free Medical Clinics that were directly tied to civil rights activism and expanded healthcare access for Black community members. The establishment of these clinics has lasting effects today grounded on the fundamental, radical purpose of providing free, culturally responsive healthcare (Bassett, 2016; Morabia, 2016).

In early 1965 a group of activists, among them medical students and doctors from the Medical Committee for Human Rights, formed a march in rural Mississippi during what became known as Freedom Summer (Dittmer, 2009). The freedom marchers were brutally attacked on what became known as "Bloody Sunday" (Woodard, 2022). Dr. Jack Geiger and Dr. Count Gibson, known for founding the Community Health Center Movement, provided life-saving medical treatment to several marchers who had been beaten in the protest. Among the marchers was Civil Rights leader John Lewis who survived a skull fracture and later became a well-recognized US Congressman and spent his life as a champion of community health centers and social justice (Simmons, 2020).

Community health centers first began as small demonstration programs as part of President Johnson's War on Poverty. The first two CHCs were developed in two vastly different areas of the country, Mound Bayou, Mississippi, and Boston, Massachusetts. Although the landscape of these first CHC models was different, the social determinants of health were very similar - poverty, community inequities, lack of access to care, and segregation (Woodard, 2022). These small demonstration projects were initially perceived as many to be a short means to address issues of health resulting from poverty. The reality began to look quite different as CHC became a successful model to comprehensively address systemic and population health

problems and implement social change programs that improved access to food, housing, clothing, water, sanitation, education, and economic opportunity (Taylor, 2004).

The Community Health Center Model

The CHC model was developed as part of the Office of Economic Opportunity (OEO) to improve access to health and social services in medically under-resourced communities and to promote community empowerment (*National Association of Community Health Centers, Inc*, 2020). The design and administration of CHC required significant community involvement to ensure they remained responsive to community needs. In the 1970s, the OEO ended, and the health centers program was moved to the Department of Health, Education, and Welfare (HEW) (Taylor, 2004). HEW later evolved, and the health center program administration was moved under the U.S. Department of Health and Human Services (DHHS), the Health Resources and Services Administration (HRSA), and the Bureau of Primary Health Care (BPHC) (Taylor, 2004). In 1975, Congress authorized neighborhood health centers as "community and migrant health centers." In 1996, the Health Centers Consolidation Act created the consolidated health centers program under §330 of the Public Health Service Act (PHSA) (Taylor, 2004).

While the legislative authority for the health center program has evolved over the last 30 years, the founding philosophy and founding of the program remain the same. To receive §330 grant funds, a health center clinic must meet the following statutory requirements:

1. Serve a federally designated medically underserved population (MUP), are located in a federally designated medically underserved area (MUA) or have non-profit, public, or tax-exempt status.

2. Provide comprehensive primary health care services such as case management, transportation, translation, and other supportive services to facilitate access to care.
3. Have a governing board in which the majority is composed of patients of the health center.
4. Provide services to all in the service area regardless of ability to pay and offer a sliding fee schedule that adjusts according to family income.

The 330-grant program has grown significantly in the number of grantees and funding levels since first funded in 1965. The 330-grant program is subdivided into separate grant competitions for the community, migrant, public housing, and homeless health centers, which allows community health centers to tailor their applications to their community needs. However, it is important to note that various sources fund health centers and federal grant funds constitute only approximately one-quarter of overall health center revenues (Taylor, 2004).

While the 330 grant funds are an important source of funding for CHCs, even more critical to the continued vitality and sustainability of CHCs is the reimbursement policy under the Medicaid program. In 1989, the Federally Qualified Health Center (FQHC) program created a payment policy for health centers by requiring "cost-based" reimbursement for both Medicaid and Medicare. The methodology resulted in health centers being paid based on their actual costs for providing care, not a rate negotiated with the state Medicaid agency or set by Medicare. Over the years, Congress has subsequently changed this reimbursement policy in payment reform, and new changes are on the horizon, as described in the next section (*National Association of Community Health Centers, Inc*, 2020; Taylor, 2004).

The terminology used to define community health centers can be confusing, and the federal terminology for describing primary care sites may not be operative at the community level. While most organizations refer to themselves as community or primary care clinics, others

prefer to be called health centers or community health centers. For this literature review, however, community health center refers to clinic systems that receive 330 grant funds, lookalikes, clinics under Indian Health Service, and Rural Health Clinics (RHC). The eligibility for FQHC designation is limited to three types of primary care clinics:

- Clinics that receive funding under §330 of the PHSA are often called "health centers."
- Clinics determined by the Secretary of Health and Human Services to meet all the requirements for receiving such a grant but do not receive grant funding, commonly called "FQHC lookalikes."
- Clinic outpatient facilities are operated by a tribe or tribal organization or an urban Indian organization.

The Health Resources and Services Administration (HRSA) determines FQHC eligibility for 330-funded health centers and lookalikes, and the Centers for Medicare and Medicaid Services (CMS) administers the FQHC payment policy. The Indian Health Service determines eligibility for tribal and urban Indian programs, which are designated FQHCs that provide comprehensive primary care and services to American Indians and Alaska Natives. The Rural Health Clinic (RHC) is not considered an FQHC but receives cost-based reimbursement from Medicaid and Medicare to facilitate payment to those in federally designated rural areas with limited access to primary care services (Gale & Coburn, 2003; Taylor, 2004).

The California Community Health Center Landscape

Community health centers share a common mission to provide care to every person who walks through their doors, regardless of their ability to pay. CHCs increase access to comprehensive primary care by reducing barriers such as cost, lack of insurance, distance, and

language for their patients. CHCs also provide services to special populations, including those classified as Limited English Proficient, agricultural workers, and persons experiencing homelessness. According to a report produced by the California Primary Care Association using data from the 2019 Office of Statewide Health Planning and Development (OSHPD) Annual Utilization Report (AUR), there are a total of 1,303 CHCs in California as specified by subdivision (a) of Section 1204 of the CA Health and Safety code as "Primary Care" Clinics (California Primary Care Association, 2021a). Of the 1,303 CHC reported in 2021, 892 were FQHCs, 63 were FQHC Look-Alike Sites, and 13 as Rural Health Center (RHC) sites, and the remaining 348 were Community Clinics, Indian Health Center Sites & Free Clinics.

According to this CPCA 2021 report, one in five Californians receives care at a CHC, equating to 7.2 million patients and 22.3 million encounters (California Primary Care Association, 2021a). Of the 22.3 million encounters reported in 2021, over half (54 %) of CHC patients identified as Hispanic or Latino, eight percent identified as Asian and Pacific Islander, and six percent identified as Black (California Primary Care Association, 2021a).

CHC is responsible for providing a considerable proportion of comprehensive primary care services to publicly subsidized or uninsured people. In California, 63% provide Medical Services, 11% provide dental services, 11% provide behavioral health, and 14% provide other services. Community Health Centers provide services predominately to patients under 100% of the federal poverty level and save 24% per patient annually compared to other providers through government-subsidized programs like Medical and Medicare (California Primary Care Association, 2021).

The California Executive Leadership Landscape

As noted in the patient demographic data in the previous section, CHCs are located in diverse communities that are predominantly communities of color. Now understanding the diversity of the patients and communities seen by CHCs, the next portion of this review considered data to comparatively understand the CHC executive leadership landscape. This review begins with a 2003 statewide study titled *Securing the Safety-net: A Profile of Community Clinic and Health Center Leadership in California* that was commissioned by the Regional & State Clinic Associations of California and led by CompassPoint Nonprofit Services. This study collected data from CEOs of California community clinics, health centers, and clinic consortia through 97 surveys, focus groups, and interviews (Peters et al., 2003).

This 2003 study found that a large majority (70%) of community health leaders were white; the other ethnic groups with 5% or more representation were Asian (8%), Latino (8%), and African American (5%). The qualitative data highlighted in this report also noted the critical need for diversity. Several respondents questioned whether the leadership candidate pipeline is diverse enough. Other respondents argued that CHC leadership diversity should be intentionally cultivated because it is aligned with the community health mission. One respondent in this survey noted that "Professional and academic institutions are failing to produce racially/ethnically diverse graduates who know about the nonprofit world, community needs, and professional approaches or solutions " (Peters et al., 2003).

This 2003 survey revealed that more female CEOs than males lead CHCs. Of the 81 clinic CEOs who provided their gender, 59% identified as female, and 41% identified as male. Of these respondents (59%) of clinics and 83% of consortia described in the glossary as Regional Associations of California (RAC), led by women CEOs. A large majority (70%) of clinic

executives are 50 years old or older, exceeding the national average of 49%. As for the level of education, the overall clinic CEOs had a higher level of education than the national sample of nonprofit executives. Whereas 58% of executive directors nationally have a master's degree or doctorate, 67% of California's community clinic CEOs hold one or both of these advanced degrees. Clinic CEOs are also likely to have a graduate-level business or administration education: common academic pursuits included health care administration, public health, and business (Peters et al., 2003).

The 2003 study provided a series of Calls to Action for CEOs, boards, associations, and funders that was followed by a similar study in 2009 called *The State of CEO Leadership in California Community Clinics.* This 2009 study was led by BTW informing change (BTW) and CompassPoint to provide a snapshot of the current leadership landscape and implications. Compared to the 2003 study, a similar trend was seen in 2009, in which about two-thirds (67%) of respondents described themselves as White/Anglo, and more than half (60%) of the respondents to the CEO survey were female. The average age of respondents is 55, ranging from 30 to 80 years old, with one-third over 60 years old and (77%) aged 50 or older. Sixty-eight percent had graduate degrees; 51% had a master's degree, and 17% had a doctorate. Overall, the findings and trends seen in the 2009 study were similar to the 2003 study, with the only notable exception being respondents' age in 2009, in which a higher percentage of 50 or older respondents (77%) compared to the 71% in the 2003 study (Howard & Dube, 2009). This report highlighted that CHC founders and longtime leaders were rapidly approaching retirement age, and fostering new leadership was a clear priority (Howard & Dube, 2009).

This study developed a series of reports that provided timely information about how best to support and retain current leaders and prepare future ones. A culminated summary document

titled *Community Clinic Leadership in California: The State of the Field & Implications for the Future,* presented key findings of CEOs, Medical Directors, and emerging leaders in CHCs and revealed gaps and needs for leadership at CHCs, particularly for emerging leaders. Most emerging leaders aspired to a senior leadership position but faced numerous barriers to achieving their goals. The survey results found that robust and disciplined succession planning in community clinics is uncommon. 97% of emerging leaders aspiring to senior leadership positions are not explicitly receiving professional development to advance in their organization. 36% of emerging leaders do not feel they had the opportunity to take on new responsibilities or be promoted within their current organization, and 47% believe there is no room for advancement in their current organization. These reports informed the development of the Clinic Leadership Institute (CLI), described later in this literature review, as well as the development of the Leadership Equity Program after the sunsetting of CLI in 2019.

In 2019, CPCA also repeated a pulse on the CHC leadership landscape in the *2019 CPCA Workforce Development Survey* to better understand leadership diversity within the CPCA membership (California Primary Care Association, 2020). As part of this survey, 77 CEOs responded and revealed similar trends as the former two studies described above, in which the majority (58%) were White, 18% Hispanic or Latino, 10% Asian, 9% Black or African American, 2% American Indian or Alaska Native, 2% Native Hawaiian or Pacific Islander, 2% Prefer not to answer, 1% Other (California Primary Care Association, 2020). Gender identity trends were also similar: the majority (57%) identified as female, 42% identified as male, and 1% identified as transgender and other (California Primary Care Association, 2020). Data from this pulse survey revealed there continued to be a gap in the diversity within the existing CHC executive leadership as compared to the diversity of patients and communities seen by CHCs.

This data also drew attention to the need to continue fostering a diverse leadership pipeline, leading to the development of the Leadership Equity Program (LEP) in 2020.

The Impact of COVID-19 on the Community Health Center Model

The COVID-19 pandemic has profoundly impacted the entire health care delivery system, including Community Health Centers. In response to the COVID-19 pandemic, CHCs quickly adapted their operations and care delivery models. The CHC pandemic response across the state and nation reinforced that CHCs are nimble and can reach patients creatively by leveraging telehealth modalities, leading successful community outreach and education efforts, and repurposing staff and sites for emerging needs (Backstrom et al., 2021).

The COVID-19 pandemic also demonstrated how the current FQHC payment methodology is "an increasingly outdated payment model that is ripe for change" (Backstrom et al., 2021). As face-to-face visits declined during the pandemic, the primary source of reimbursement revenue from the MediCal program, CHCs have faced financial challenges in maintaining their operations. During the pandemic, in-person visit volume fluctuations resulted in downsizing and temporary closures of 13% of California's health centers. Financial analysis from the California Health Care Foundation in 2021 revealed that the largest health centers in the state took the brunt of the financial losses directly resulting from COVID-19 measured by revenue, the number of patients, and the number of sites (Coleman & Backstrom, 2021). CHCs that provide care the highest proportion of MediCal patients sustained almost all the financial losses (Backstrom et al., 2021; Coleman & Backstrom, 2021). Such trends threaten access to care and health equity, considering CHCs provide care primarily to low-income, and communities of color most disproportionately impacted by the pandemic. As noted in a report by Coleman &

Backstrom (2021), the challenges faced by CHCs across the state illuminated that health centers' operating model needs to be updated to be less impacted by the fluctuations in in-person visit volume.

In 2021, the Health Resources and Services Administration (HRSA) awarded over $1 billion to 175 California health centers from the Biden Administration American Rescue Plan Act (*Health Resources & Services Administration (HRSA)*, 2021). While temporary federal relief and policy changes, such as reimbursement for telehealth services, supported the communities seem by CHCs during the pandemic, it does not solve the root issues with the community health center model in this new era of payment reform, value-based care and telehealth innovation (Backstrom et al., 2021).

In response to exploring ways to improve FQHC stability and sustainability, The California Health Care Foundation gathered insights from an advisory panel of California FQHC experts and reflections from several interviews with health center executives between October 2020 and February 2021. Health center executives were selected based on recommendations by the advisory panel and reflect the diversity of health centers in the state. This report highlighted policy recommendations to improve FQHC stability, health equity, and access to a broader range of services (Backstrom et al., 2021). The policy recommendations focused on modernizing payment to FQHCs through an alternative payment model (APM), recognizing the value of telehealth modalities, including telephone calls, and investing in the healthcare workforce (Backstrom et al., 2021).

CHC leaders recommended further support for APM and the California Advancing and Innovating Medi-Cal (CalAIM) that could provide more financial predictability and greater operational flexibility for health centers to customize care delivery to meet the unique needs of

their patients and communities. These new models offer CHC opportunities to be reimbursed for nontraditional services such as same-day integrated primary and behavioral health visits, group visits, community health worker outreach, case management, and coordination of care across systems (Backstrom et al., 2021; Capital Link, 2021). Since the pandemic, CPCA has been actively working with the Department of Health Care Services (DHCS) and other key stakeholders to modernize payment methodology for health centers. A modernized payment methodology for health centers aligns with the CalAIM program and the state's efforts to promote a more holistic, value-based, and patient-centered approach to care (California Primary Care Association, 2021b).

Leadership Development and Adult Learning Theory

The next portion of this literature review focuses on understanding leadership development as supported by adult learning theory, what constitutes leadership development program participants, and the current and emerging need for skills and capacities needed in leadership development programs.

Leadership development programs have emerged or adapted to address the emerging needs in leadership development in the era of the COVID-19 pandemic and racial reckoning across the United States. These events have heightened awareness of systemic racism, racial inequities, and the need to prepare leaders who can step up to social responsibility in all dimensions of their work. These events have called attention to the need to develop leaders with equity-centered skills and mindsets to address these complex issues. These skills and mindsets are part of a person's value system and worldview needed to propel transformative change. Therefore, leadership development needs to foster reflexive and equity-minded skills to manage

the complexity of our diverse and interconnected world (Andreadis, 2002; McCauley et al., 2004; Uhl-Bien & Marion, 2009). In thinking about the need for transformative change underscored by the pandemic and racial reckoning, it is important to emphasize that traditional leadership development that focuses on external skills such as strategy, organizational development, etc., is insufficient as we become aware of the impact of system racism and inequities that reinforce the need to prepare leaders who also embody social responsibility and who possess internal skills such as self-awareness, reflection, and empathy to lead and be part of this change.

Leadership development represents an investment in individuals or a group of individuals to intentionally develop their skills and capacities to be more effective and better equipped to address a myriad of social goals (Day et al., 2014; Orians et al., 2018). A report developed by *ORS Impact* (2018) noted individuals participate in leadership development because they are perceived to be well-positioned to advance goals because of their ties to a place, an organization, a sector, or an issue (Orians et al., 2018). Some leadership development programs may be intended for individuals who are already leaders in their organizations, communities, or professional fields, while other programs may focus on emerging leaders who can serve as the next generation of leaders (Orians et al., 2018). It is also noted that some programs may focus on recruiting individuals to intentionally support the development and success of diverse leaders who are people of color and women, as in the case of the Leadership Equity Program.

Regardless of the specific criteria used to select leadership development participants, most and not all participants function in complex interactions and situations with people, organizations, and social and political entities and processes. As supported by adult learning theory, leadership development participants also bring years of lived and fieldwork experience,

come with real-world knowledge and offer many assets to learning environments. However, with these rich assets, participants may also have unconscious or conditioned assumptions and biases (Merriam et al., 2007).

It is argued that leadership development that transforms leaders' inner sense of social responsibility can benefit from applying strategies grounded in the tenets of adult learning theory (Day et al., 2014; Merriam et al., 2007). These strategies emphasize relevance, meaningfulness, collaboration, and feedback as critical for transformative leadership development. Macolm Knowles (1980), who originated adult learning theory, also known as andragogy, emphasized paying close attention to what adult learners bring (Knowles, 1980). Knowles defined assumptions that demarcate adult learners and learning that continue to apply today in delineating adult learners' desire for control of learning, immediate application, relevance, and opportunities to test understanding as a formative feedback process and to learn best in a collaborative and respectful climate.

The principles of adult learning are integrated into Conger's (1992) book Learning to Lead, where he lays out four fundamental principles for leadership development - skill-building, feedback, conceptual understanding, and personal growth (Conger, 1992). These principles are most effective in formative social or collaborative processes that include feedback and iterative learning opportunities grounded in social constructivist learning theory.

Skill building is the most common method noted by Conger (1992) used in leadership development and often seems to be a straightforward process of input-practice-output, reminding us of behaviorist approaches. However, as Allen (2007) points out, Conger's work on these four aspects of leadership development is focused on cognitive and transformative principles (Allen, 2007). Even with skills development, adult learners need relevance and feedback and do better in

peer collaboration. Feedback supports leaders in locating areas for improvement depending on the goals using a variety of approaches such as self-reflections, team-based learning, coaching, and mentorship.

Conceptual understanding is the second most popular leadership development approach that focuses on improving a learner's knowledge by presenting concepts and models (Conger, 1992). This approach involves integrating lived experiences as part of prior knowledge with new input and opportunities for reflection and subjective interaction between the learner's lived experiences and the new knowledge. Conceptual learning can be supported by using video clips, case studies, storytelling, expert panels, and observation (Allen & Hartman, 2008a; Allen & Hartman, 2009).

In thinking about Conger's four dimensions to fostering leaders able to work with complex contexts, personal growth stands out as a way to support leaders toward a reflexive awareness of assumptions and blind spots (Conger, 1992). Leaders can no longer avoid reflexivity as a core capacity to be socially responsible in working with diverse others. Strengthening these capacities requires surfacing and addressing habituated thinking to be open to diverse ideas and innovations in today's complex world. Leaders today must not just listen to multiple perspectives; they must be alert to whether they are listening openly or through a filter of assumptions and bias. In working with contexts of change and innovation, especially with systems change, a reflexive practice helps leaders stay alert to emerging ideas and new situations.

There is increasing recognition that current leadership development efforts should emphasize fostering a mindset toward solving society's complex, systemic issues (Arnold et al., 2021; Fernandez & Corbie-Smith, 2021; Orians et al., 2018). Effective leadership development can also be a powerful vehicle for driving social change, which has led to an increase in

programs that aim to strengthen the leadership capacity of not only individuals but also their organizations, networks, and communities (Orians et al., 2018; Reinelt et al., 2003).

Systems Change Evaluation

This next portion provides a review the literature on how leadership development has been evaluated using system theory and systems thinking and understanding systems change evaluation design approaches that can be considered for the Leadership Equity Program. As widely cited in the literature, the evaluation of leadership development should look beyond the immediate outcomes associated with the individual to consider the contribution of leaders to the issues, sectors, communities, and systems they are trying to affect (Hargreaves, n.d.-a; Orians et al., 2018; Patton, 2011; Reinelt et al., 2003).

Scholars in systems evaluation recommend a series of steps in focusing the evaluation that begins with identifying the intended users or stakeholders— "individuals, groups, or organizations that affect or are affected by an evaluation process and its findings" (Patton 2008). Secondly is determining the evaluation's purpose(s), which can be to 1. support the development of an intervention, 2. improve an intervention, 3. judge the value or worth of an intervention or monitor the intervention's processes and outcomes for purposes such managing a program (Hargreaves, n.d.-b; Patton, 2008).

Before reviewing systems evaluation design, it was necessary to gain a conceptual understanding of system theory or systems science, defined as an interdisciplinary study of systems in which system thinking can be learned (Peters, 2014). Systems thinking is used in complex, interactive situations and interventions with unstable dynamics and emphasizes the patterns and relationships between parts and the whole rather than the parts in isolation

(Hargreaves, n.d.-a; Trochim et al., 2006). A system comprises interacting, interdependent, and corresponding parts that may have subsystems and operate within broader systems (Holland, von Bertalanffy 1955; Barabasi 2002). Systems can range in scale and size from the individual level to the group, community, society, and policy levels. All systems share specific basic attributes or conditions, which are called "boundaries, relationships, and perspectives" and "conditions of self-organization" that create patterns of behavior called system dynamics that can shift over time (Wheatley 2001, Midgley 2007; Williams and Imam 2007; Cabrera et al. 2008; Patton 2010a). The dynamics within a system can be unorganized, also known as random, organized, also known as simple or complicated, or self-organizing, also known as complex or adaptive (Zimmerman et al. 1998; Snowden and Boone 2007). System dynamics are considered simple and organized if relationships are predictable and there is agreement on a system's goals. Dynamics are often chaotic and unorganized if no shared goals or connections exist.

System thinking is increasingly growing attention and utilization for system change interventions that can vary from projects affecting small organizational workgroups to large, multilevel, multi-sector change initiatives (Hargreaves, n.d.-a; Mabry et al., 2010). Systems thinking can also support the development of a program logic model to understand what and how a program will trigger the change process. Systems thinking is used in program design and evaluation by incorporating an intervention's theory of change about how a particular change will come about (Weiss, 1995). Weiss (1995) popularized the term theory of change to describe the set of assumptions that explain a series of steps that lead to the long-term goal and how program activities and outcomes are connected (Weiss, 1995). Weiss inspired new evaluation work linking theory of change to systems thinking and complexity in which change is no longer seen as linear but as having feedback loops. Systems thinking also considers the purpose of the

evaluation and aligns evaluation approaches and methods with the dynamics of the intervention and its situation or context, particularly for programs and interventions that are complex, interactive, and have unstable dynamics (Hargreaves, n.d.-b).

While the paragraph above provides a basic understanding of systems thinking and systems theory, it is important to recognize that the study of systems in the field of evaluation is relatively new, having been introduced in the past 15 years (Hargreaves, n.d.-b). Therefore, there is limited literature about designing and conducting system change evaluations. There is no best design for system evaluation because it depends on the evaluation purposes, the program's complexity, and its context (Hargreaves, n.d.-a).

For the purpose of understanding systems evaluation, this literature review utilized *Evaluating System Change: A Planning Guide* developed by Mathematica Policy Research, which describes ways to evaluate system change and ways to apply systems thinking in the evaluation of the Leadership Equity Program. Based on this report, different evaluation methods and questions can apply systems thinking depending on the purpose(s) of the evaluation, which can be formative, developmental, summative, or focused on monitoring and accountability (Hargreaves, 2014; Patton, 2008).

The first type of system evaluation design described in this planning guide is called a formative evaluation which is typically used to confirm that the program model has been implemented as planned and improve an intervention (Hargreaves, n.d.-a). Formative evaluations are used in simple to complex programs that involve multiple systems. Incorporating systems thinking within the evaluation's design can help capture the system properties and dynamics of the program and support the understanding of how a particular change came about. This type of design is used to improve the design, operation, or implementation of new or preexisting

program models, identify the program's strengths and weaknesses and determine whether participants are making appropriate progress toward the program's goals (Patton 2008). This type of evaluation is most beneficial during the early phase of a program to confirm that program implementation occurred as planned, identify the program's strengths and weaknesses, make corrections and adaptations, and determine whether participants are making appropriate progress toward the program's goals (Hargreaves, 2014; Patton, 2008). The formative evaluation design closely aligned with the current needs of the Leadership Equity Program and the evaluation purpose. Findings will support the program in a developmental and longitudinal evaluation to further support the program's growth and identify opportunities for adaptation and improvement.

The second type of system evaluation design is called a developmental evaluation which is designed to support the ongoing development and adaptation of new program models and the evaluation of complex multilevel, multi-sector system change interventions. While some elements of the developmental evaluation also aligned, this design was not chosen for this study because, typically, such evaluations involve the evaluator to provide reality testing and rapid feedback on activities relating to the intervention, which were be done or tested for this study (Patton 2008).

Summative evaluations are used to judge the value or worth of an intervention to inform the program's effectiveness, cost, and sustainability to make decisions about its continuation, scale-up, or termination. A summative evaluation was not chosen since the program is new and is planned to continue and did not involve an external evaluator to verify that the program achieved the desired outcomes (Patton 2008).

Lastly, systems evaluation can also be used to monitor the intervention for program management and accountability purposes, which involves tracking program process and outcome

measures through management information systems. The primary intention of this study was not for program monitoring and accountability, given that the Leadership Equity Program is in its first year of implementation and, therefore, would be too soon to track and see trends. However, the data collected from this study could be used to monitor program processes and outcomes as the program continues to be implemented in future years.

Lessons Learned from Leadership Development Programs

The third portion of this literature review is aimed to summarize two key programs, the Clinic Leadership Institute and Health Management +, which informed the formation and development of the Leadership Equity Program. The evaluation of both programs was also reviewed to inform the evaluation design for this study.

Clinic Leadership Institute

CLI was created through a partnership with the Blue Shield of California Foundation (BSCF) and the Center for Health Professions at the University of California, San Francisco (USCF), in 2008. For ten years, the Clinic Leadership Institute (CLI) Emerging Leaders Program provided intensive professional development to over 200 participants from various health centers, regional clinic consortia, and CPCA. The Clinic Leadership Institute (CLI) Emerging Leaders Program provided professional development to 10 cohorts from multiple health centers for ten years, and the final CLI cohort graduated in June 2018. CLI was a cohort-style program with cohorts of up to twenty-five participants engaging in six in-person sessions, each lasting three to five days over eighteen months. Program participants were required to have a minimum of three years of experience in the health center field, holding a management or supervisory role, nomination by leadership, and the expectation of moving into an executive position within 5-8

years. CLI also included a capstone project, peer networking, mentoring, and a robust Alumni Network (Howard et al., 2011; Kim Ammann Howard et al., 2010; *Preparing the Clinic Leaders of Tomorrow*, 2012; *Preparing the Next Generation of Health Center Leaders: The Experience of the Clinic Leadership Institute's Emerging Leaders Program*, n.d.).

Informing Change led the design and implementation of an evaluation of the Clinic Leadership Institute program. The data collected helped inform the program's impact in developing future leaders for the community health centers field in California, which included understanding strengths, opportunities for improvement, and lessons learned. The evaluation was designed as a prospective evaluation that focused on the experiences and trajectories of the first five cohorts from when participants started the program to up to five years after completing the program. This evaluation gathered data about the participants during their time in the program and as they continued along their career paths (Arnold et al., 2021; Kim Ammann Howard et al., 2010; *Preparing the Next Generation of Health Center Leaders: The Experience of the Clinic Leadership Institute's Emerging Leaders Program*, n.d.).

Multiple types of data were collected from program participants and alumni, the CEOs that either sponsored or employed the program participant, the participant's colleagues, and stakeholders in the community health centers field and program implementers. The data was collected immediately after graduation and annually for up to five years. Quantitative data consisted of an alumni survey that was administered from 2010 through 2014 to the first five program cohorts (94% response rate), a participant survey (92% response rate), and a CEO survey in 2014 (49% response rate). Qualitative data, including interviews with 143 people and focus groups with 61 people representing program alumni, CEOs, program staff, and stakeholders, was also collected from observation and document review of program materials

and secondary data. Formal evaluations show positive trends for graduates' career growth since the beginning of the Program: 77% advanced to a more senior role or position; 60% received a salary increase of 10% or more; 46% experienced significant growth in responsibilities, and 44% experienced much greater job satisfaction. The CLI program was effective at training clinic leaders. CLI alumni showed increased knowledge, confidence, and skills in understanding the healthcare landscape, holding a broader organizational perspective, leading people and projects, and making data-driven decisions (Arnold et al., 2021; Kim Ammann Howard et al., 2010; *Preparing the Next Generation of Health Center Leaders: The Experience of the Clinic Leadership Institute's Emerging Leaders Program*, n.d.). The CLI evaluation included several key recommendations based on successes and challenges that provide an important foundation for exploring how to move the Leadership Equity Program forward.

Health Management +

CPCA developed and launched HealthManagement+ (HM+) in partnership with We Will, Inc., formerly the Kiely Group, in 2013. As of January 2021, HM+ has trained 15 cohorts, reaching more than 300 CHC staff participants. The cohort-style program originally consisted of three in-person sessions, each lasting one and a half or two days, and five webinars over nine months for cohorts of 20-30 participants. There are no minimum experience requirements to apply to the program. The program consisted of three in-person sessions before COVID-19, each lasting one and a half or two days, and five webinars over nine months are now 100% online. HM+ includes informal peer networking and an Alumni Network launched in 2018.
HM+ was proven successful and impactful, as demonstrated by the many applications received for each cohort. Interest in and demand for HM+ has increased to such an extent that we now

support multiple overlapping cohorts each year. CPCA began an informal evaluation of HM+ in 2015 and continues through annual surveys to show the program's short-term and long-term impacts. A survey from 2017 that included graduates from the first five cohorts revealed two significant outcomes on graduates' career growth after completing HM+: 76% received at least one pay increase, and 50% were promoted at least once. However, HM+ was not created by CPCA to fulfill all the needs of future health center leadership, nor does the program sufficiently meet the needs of those who actively aspire to C-Suite or other executive-level positions. CPCA plans to maintain what is working well about the HM+ program and examine ways to leverage its success to support the development of the Leadership Equity Program.

Evaluating the Need for the Leadership Equity Program

CPCA engaged Schoen Consulting from 2019 to early 2020 to conduct a CHC needs assessment, and identify synthesized, developed, and tested model options for the Leadership Equity Program. Direct feedback from CPCA members and CHC staff was essential to these assessments in response to the following key questions: Is there a need for a leadership program with a Diversity, Equity, and Inclusion (DEI) focus? Is there a willingness to pay for CHC-specific leadership programs? What is the most important content to cover, and in what format? Is CPCA the right convener for a leadership program? Given the success of CLI, are CHCs willing to consider a new program model?

From this research and stakeholder interviews with CHC staff in California, numerous key findings informed and validated CPCA's development of the LEP. First, CPCA found a clear need and demand for a CPCA-sponsored leadership development program that should target aspiring C-Suite leadership (those that are new or aspire to be within three years). Second, it was

confirmed that CPCA is well placed to convene the program as it aligns with the organization's workforce strategy. CPCA was identified to have several critical strategic assets to develop and launch the leadership program, such as access to mentors, access to policymakers, creating and engaging an advisory board, and relationships with expert faculty. It was recommended that the content be delivered in the context of CHCs, focusing on diversity, equity, and inclusion (DEI), personal leadership development, skills for leading others, managing change, and management skills for leading the CHC business. Lastly, CPCA identified the need for and value of a mixed-modal training program (in-person and online) and developed recommendations for program size, target audience, pricing structure, and sustainability.

Summary of Literature

This literature review explored various community health center leadership and development topics in the context of system change and evaluation. The first portion consisted of understanding CHC systems of care and the need to prepare leaders who can not only lead an ever-changing, complex, and dynamic environment but are also grounded in the mission of community health centers rooted in the civil rights movement.

The second portion contextualized literature on leadership development as supported by adult learning theory. The literature reviewed supports the Leadership Equity Program's approach to leadership development for a complex world and offers opportunities for peer-based, feedback- and application-oriented methods backed by adult learning theory.

The literature review of the use of systems evaluations has adapted traditional quantitative and qualitative research methods and developed innovative approaches and frameworks, particularly for complicated and complex systems like the community health center model. As

highlighted in a report supported by the Kellogg Foundation's scan of fifty-five leadership development programs, there is a need for leadership development programs to evaluate the connection between changes across systems at the individual, organizations, community, and system levels (Orians et al., 2018; Reinelt et al., 2003).

System evaluation designs recognize and consider the system dynamics of the intervention's context or situation between parts and the whole rather than the parts in isolation (Hargreaves, 2014). The formative evaluation design was selected as the primary systems evaluation design for this study as it most closely aligns with the current needs of the Leadership Equity Program and most directly informs the evaluation purpose.

The third portion of the literature review examined the literature of two key programs, including the evaluation of both programs. Both programs and evaluations included data on the successes and challenges that provide an essential foundation for exploring how best to develop the evaluation study for the Leadership Equity Program and future development on the opportunity to evaluate this program for systems change where other programs have experienced limitations. The Leadership Equity Program's needs assessment demonstrated a clear need and demand for a CPCA-sponsored leadership development program targeting aspiring C-Suite leadership aligned with CPCA's mission and strategic plan.

III. Chapter 3: Methodology

This research study focused on evaluating changes catalyzed by the Leadership Equity Program (LEP) using Kirkpatrick's four levels of evaluation and systems thinking. Secondly it explored ways the program can continue to be evaluated beyond a formative evaluation to understand the program's impact across multiple system levels, including the organization and communities in which participants lead (Dave et al., 2021). Using a mixed-methods concurrent triangulation design, this formative evaluation study gathered valuable program outcome data to inform the measurement of the program's first year of implementation and set the foundation to measure its long-term impact.

This chapter describes in depth the research design and methodology used to address the study's research questions, including the population, sources of data, and data collection and analysis procedures. The rationale for using the Kirkpatrick Model and Most Significant Change (MSC) technique will also be described. This chapter will conclude by discussing the ethical considerations and limitations of the study. The data collection instruments are provided in the *Appendices.*

Research Questions and Design

This study utilized survey data to respond to the first questions regarding participants' reactions to the program regarding satisfaction, relevance, and utility. The survey data was also be used to assess if participants experienced increased knowledge and skills from participating in the program. The Most Significant Change Technique was used to evaluate the most significant impact the program had on them due to their participation in the program and at what system level this impact occurred. This study focused on the following research questions:

- What were LEP participants' reactions to the program regarding satisfaction, relevance, and utility?
- Did LEP participants experience increased knowledge and skills due to their participation in the program?
- What were the most significant changes (MSC) that LEP participants experienced due to their participation in the program?
- What barriers to change did LEP participants experience during their participation in the program?

Population and Sample Selection

The research study participants consisted of 16 LEP cohort participants who were selected to participate in the Leadership Equity Program. The selection criteria used were that the participant was currently in mid-level management or supervisory role and was employed in a CHC in California or by a regional CHC consortium. The participants also needed to be nominated by an executive team member as someone who the organization envisioned would ascend into an executive leadership role within 1-5 years (e.g., Chief Executive Officer, Chief Medical Officer, Chief Operations Officer, Chief Information Officer).

LEP Participants represented a range of racial and ethnic groups (e.g., Hispanic or Latinx, African American or Black, Asian Americans and Pacific Islanders), disciplines (e.g., medicine, nursing, public health, behavioral health, health technology, health administration), and positions (e.g., Director, Deputy Director, Assistant Chief). Of the 16 participants who completed the program, 14 identified as Black Indigenous Person of Color (BIPOC), and 2 identified as white. For race and ethnicity, 5 participants identified as Asian, 4 identified as Hispanic or Latino, 2

identified with more than one race, 2 identified as White, 1 identified as American Indian or Alaska Native, 1 identified as Other, and 1 preferred not to answer. For age, 1 participant's age is between 25-34 years old, 9 are between 35-44 years old, 5 are between 45-54 years old, and 1 participant preferred not to answer. For gender, 12 participants identified as Female, 3 participants identified as Male, 1 participant preferred not to answer and 0 participants self-identified with other gender identities.

Of the 16 participants who completed the program, 13 worked in a Federally Qualified Health Center (FQHC), 1 worked in an FQHC Look-A-Like, and 2 worked in a Regional Association Consortium (RAC). 7 participants reported they had worked in their current organization for 5 years or less, 4 reported they worked in their current organization for 6-10 years, and 5 reported they worked in their current organization for 11 years or more. 7 participants were currently in their position for approximately 1 year, 5 were in their position for approximately 2-4 years, and 4 were in their position for approximately 6 years or more. The participants represented urban and rural communities from regions spread across 11 counties in southern, central, and northern California. The counties represented are Alameda County, El Dorado County, Humboldt County, Los Angeles County, Napa County, Sacramento County, Santa Barbara County, Santa Clara County, Shasta County, Sonoma County, and Sutter County.

This study used convenience sampling, a non-probability sampling method that involves recruiting respondents who are "convenient" to the researcher (Taherdoost, 2016). The study's inclusion criteria were that the respondent must have participated in the Leadership Equity Program for the entire duration between March 2022 through November 2022 and completed the program. The exclusion criteria were participants who did not participate in the program or did

not participate in the entire duration. Of the 16 LEP participants, a total of 10 respondents completed the questionnaire.

Kirkpatrick’s Model

Kirkpatrick's four-level model has been used to evaluate various organizational programs, particularly for leadership development. Kirkpatrick's model recognizes participants' work in the context of multiple systems defined by their respective team environment, organizational environment, community environment, and political systems, which require defining and measuring multiple domains influenced by the program (Gellman & Turner, 2013b). An integrated and robust approach is appropriate because of the Leadership Equity Program's unique, multi-level approach to leadership development toward transformative change.

Level 1 (reaction) in a leadership program is commonly assessed using survey data. Olivero, Bane, and Kopelman (1997) assessed participants' reactions to an executive coaching program using a 5-point Likert scale across five dimensions: usefulness of materials, instructor's knowledge, instructor's facilitation, overall instructor rating, and overall workshop rating. In addition to self-reported data, Level 2 (learning) is commonly assessed using pre-and post-tests (e.g., McElrath et al., 2005; Olivero et al., 1997). Level 3 (behavior) is often assessed through surveys of participants' direct reports, peers, and direct managers are frequently used to measure perceptions of change in participants' behavior and increase in the participant's leadership effectiveness Thach (2002). Level 4 (results) can be assessed using objective measures of the impact of leadership development efforts. For example, McElrath et al. (2005) measured Level 4 and utilized employee survey scores on questions related to supervision and management, responses on exit surveys, and employee turnover before and after the training and coaching of supervisors.

Empirical studies have shown how Kirkpatrick's model has been used across the four different levels. One meta-analysis study that classified all of the published training effectiveness literature from 1960 to 2000 that used Kirkpatrick's model reported effect sizes slightly varied across the four levels of the model ranging from .60 (reaction) to .63 (learning) (Arthur et al., 2003). Avolio, Reichard, Hannah, Walumbwa, and Chan (2009) conducted a meta-analytic review of 200 published and unpublished lab and field studies and compared the impact of leadership interventions across intervention types, leadership theories, and four common dependent variables that align with Kirkpatrick's model (i.e., affective outcomes, cognitive outcomes, behavioral outcomes, and organization-level outcomes). The comparison across the common dependent variables of affective, cognitive, behavioral, and organization-level outcomes showed that studies that measured organizational performance outcomes had the most significant effect size. Studies that measured behavioral and cognitive outcomes had more significant effects than studies using affective outcome measures.

While empirical studies and literature highlight the value of using Kirkpatrick's model in leadership development, this model has also been criticized for its oversimplification and incomplete evaluation method. Additionally, it is difficult to establish causality among the results of the four different levels. For example, there is no solid evidence that high satisfaction levels are related to increased knowledge, behavior change, and results or that outcomes increase as one progresses through the levels (Giangreco et al., 2010). The four levels of Kirkpatrick's model also vary across program studies, and many programs focus only on Level 1 and Level 2, while programs apply Levels 3 and 4 (Kirkpatrick & Kirkpatrick, 2016). As highlighted in the literature, Kirkpatrick's model has limitations and advantages for evaluating leadership development programs. Using Kirkpatrick's model for this study offers the opportunity to

explore unchartered territory, as no published studies have evaluated a leadership program for leadership development training for health center leaders. This study will also utilize systems thinking and the Most Significant Change (MSC) to mitigate some of the drawbacks of the Kirkpatrick framework and test the advantages of this model, also cited in the literature.

Most Significant Change Technique

The Most Significant Change (MSC) methodology collects stories directly from program participants and systematically selects and presents the stories indicating the most significant changes (Choy & Lidstone, 2013; Davies, 2005). MSC was chosen for this study because of its utility in evaluating complex participatory programs with diverse implementation and outcomes and its emphasis on using storytelling to gather data. Using storytelling in program evaluation can help identify the unintentional, complex, and diverse outcomes of an intervention, program, or course (Dart & Davies, 2003). Included below are empirical findings that describe the value of the MSC technique and how this technique can be advantageous in evaluating the Leadership Equity Program.

The MSC data collection process involves asking participants to reflect and critically analyze the changes and outcomes they experienced during the program. The approach collects direct stories from participants without assumptions of expected or unexpected outcomes of the program, which offers opportunities for identifying changes participants experienced as a result of the program using stories rather than pre-defined indicators (Dart & Davies, 2003). MSC encourages participants to express what is valuable and most important to them and share intimate knowledge and understanding of the dynamic environments and systems they function within. The MSC approach, therefore, allows participants to share their experiences holistically

and in a concise manner. These individual stories are analyzed from the perspective of the participants rather than the evaluator, which can enlighten the program's broader influence.

The MSC technique was reconceptualized by Dart (2000), applying the theory of evolutionary epistemology from Campbell (1969), which focused on the learning process (D. T. Campbell, 1969). MSC is also informed by Lave and Wenger (1991), which explained stories experienced by individuals are constructed and derived from their socio-cultural contexts (D. T. Campbell, 1969; Dart & Davies, 2003; Lave & Wenger, 1991). Since its conceptualization, MSC has been supported by empirical studies in research literature as an increasingly popular technique and evaluative tool used in developmental programs worldwide. The popularity of MSC is primarily due to its effectiveness in identifying outcomes that cannot be identified using traditional evaluation methods, such as identifying changes that are personally significant to the participant (Kelly et al., 2004; Sigsgaard, 2002; Willetts & Crawford, 2007).

The qualitative data from MSC reveals a diverse set of outcomes within a wide range of socio-cultural and socio-ecological levels and environments. This approach aligns with the Leadership Equity Programs' socio-ecological approach that seeks to extend data collection beyond satisfaction and learning surveys to a more systematic evaluative approach. This approach offers a greater understanding of the translation of learning into the socio-cultural contexts of learners' personal and professional lives (Cohen, 1981; Denson et al., 2010; Feldman, 1989; Frick et al., 2009; Kulik, 2001; Spiel et al., 2006). As noted by Choy & Lidstone (2013), standard evaluation practices rarely investigate the impact of learning on participants' lives and work performance (Choy & Lidstone, 2013). This approach also tends to rely on standardized satisfaction surveys based on the learning content, teaching aspects, and delivery method. Learning is a socio-cultural activity shaped by local "rules, values, attitudes, expectations"

(Svensson et al., 2004). Such socio-cultural impacts are rarely targeted for evaluation despite their importance for individuals, their workplaces and communities, and the employers who sponsor participants.

MSC is also beneficial in highlighting unexpected changes and revealing data on impact and outcomes that cannot be captured through other evaluation traditional approaches such as surveys. MSC was used to supplement traditional data sources, in this case, survey data, to present a more holistic evaluation. Although MSC is not widely used in evaluating training offers opportunities to apply MSC to evaluating leadership development and capacity-building interventions. MSC stories can also promote powerful dialogue, particularly in cultures where storytelling is a key mode of communication. This participatory process leads readily to transformational learning, which is particularly important for understanding the impact of the Leadership Equity Program.

Data Collection Methods

Level 1: Reaction and Satisfaction

Reaction and satisfaction were assessed using a survey that was administered upon completing the program using Google Forms, a web-based survey software. Participant data were aggregated to obtain a percentage of participants who selected each answer choice and informed by the questions below:

- Was the program relevant to participants' current positions?
- Was the program important to participants' career aspirations?
- Do participants recommend the program to others?
- Can the program structure be improved?

- Can the program contents, facilitation, and materials be improved?

Level 2: Learning

Perceptions of learning were assessed using a survey that was administered upon completing the program using Google Forms. A retrospective pre/post design was used as research suggests this approach is often more reliable and can help decrease response shift bias that can occur on the standard pretest and post-test approaches (Fernandez & Corbie-Smith, 2021; Lam, 2003; C. C. Pratt et al., 2000; Rohs, 1999; Saleh et al., 2004; Sprangers & Hoogstraten, 1989). Learning data were analyzed using a paired sample t-test to measure whether the difference between before and after the training is statistically significant. The dependent variables are answers to the surveys. A secondary dependent variable is the response rates of the surveys. Participant data were aggregated to obtain a percentage of participants who selected each answer choice and informed by the questions below:

- Did the program provide added information?
- Do participants intend to apply what they learned?
- Did participants gain new knowledge and skills necessary as defined learning targets?
- Do participants know how to apply what they learned?
- Do participants feel confident about applying what they learned?

Level 3: Behavior

Behavior was assessed using qualitative data collected using the MSC technique. Participants were asked to write a short reflective story that best illustrates the most significant change they experienced due to their participation in the Leadership Equity Program and describe why this story is significant to them. Participants were also asked to share a short reflective story of a

change they wished to accomplish during LEP but were unsuccessful in achieving it, describe why this story was significant, and describe what some of the barriers were. For each story, participants were also asked to identify where they felt the change and barriers to change occurred as informed by the Leadership Equity Program's Socio-Ecological Approach using the following domains:

- Domain #1: **Individual Leadership Capacity:** Increase awareness, Knowledge, and skills to champion anti-racism, racial equity, and well-being within CHC leadership roles and CHC operations.
- Domain #2: **Organizational Capacity:** Strengthen CHC's capacity to recruit, retain and advance diverse leaders and expand organizational policies and practices centered on anti-racism, equity, and community well-being.
- Domain #3: **Community Well-Being:** Advance place-based practices and community-based partnerships for collective action to advance health equity and community well-being.
- Domain #4: **Political and Systemic:** Influence policies and systemic changes that advance equity and improve health outcomes for communities of color.

Level 4: Results

Findings from the MSC technique also informed further data collection methodology to support the robustness of the analysis of level 4.

Study Design

A mixed-method concurrent triangulation design was selected for this study in which both quantitative data and quantitative data were collected and analyzed concurrently for a common purpose. This design has been extensively discussed in the literature and effectively

converges different methods to understand a research question or, in this case, several research questions (Caracelli & Greene, 1993; Greene et al., 1989; Morse, 1991; Tashakkori & Teddlie, 2010). A mixed method design has the advantage of bringing together the differing strengths and nonoverlapping weaknesses of quantitative methods with those of qualitative methods.(Morse, 1991; Patton & Patton, 1990) Integrating and triangulating qualitative and qualitative methods provides a more robust analysis and can complement each method's strengths. (Caracelli & Greene, 1993; Cotten et al., 1999; Creswell, 2002; Greene et al., 1989; Ivankova et al., 2006; Miles et al., 2020). The design allows the researcher to directly compare the quantitative statistical results collected from survey data with qualitative findings from the Most Significant Change (MSC) technique to validate and expand quantitative results with qualitative data. This design has the advantage of offering detailed findings regarding participant responses and a more holistic understanding of the participant's experience in the program.

Quantitative Data Analysis

Quantitative methods generally use the deductive approach to analyze data collected from surveys utilizing a retrospective pre/post-test design to assess change in knowledge. The pre/post-test design has been demonstrated to reduce confounding response shift bias commonly associated with self-report data collection (Lam, 2003; C. C. Pratt et al., 2000; Rohs, 1999). Response shift bias occurs when there is a change in the participant's internal frame of reference for the measured item. In a "pre-test, training, post-test" evaluation design, there is a more significant concern for response shift bias when participants self-rate items at two different time points. Compared to the "pre-test, training, post-test" design, a retrospective pre-test method has been shown to control for response shift bias. The primary weakness of this approach is the

validity of recall and recall bias (Collins et al., 1985). Recall bias can result from participants' inability to accurately remember what they thought before an intervention which increases as the length of recall time increases (C. Pratt, 2000).

In a retrospective pre/post-test design, participants are asked to self-rate items at a single timepoint but reflect on the "pre-training" time. At each time point, participants rated an item for each dimension for each competency on a 5-point Likert scale. One is the lowest level of agreement with the item, and five is the highest level, based on their levels when they started at baseline (0 months) and now (ten months). Participants provided two ratings for each item— one rating when they started the program (retrospective pre-rating) and one at the end of the program. For example: Please rate your level of knowledge of anti-racism when you started the program: 1 = none through 5 = expert. Please rate your level of knowledge of anti-racism now that you have completed the program: 1 = none through 5 = expert.

Knowledge and skills were analyzed across the four competency domains: Antiracism and Racial Equity, Leadership Development, Health Center Operations, and Community Well-being. Descriptive statistics were performed at each timepoint using SPSS, creating composite variables using participants' reported knowledge and skill levels at each competency level. The participants' growth was analyzed along the evaluative dimensions using the composite data and competency domains. Wilcoxon's signed-rank tests were done in the final analysis phase using data at baseline (0 months) and program end (10 months). The nonparametric Wilcoxon signed-rank test was used to investigate if there was a change in knowledge and skills by comparing retrospective pre and post-test scores. The Wilcoxon signed-rank was selected because the data met the three assumptions required for the test results to be valid. The first assumption is that dependent variable test scores were measured at the ordinal level using a Likert scale. The

second assumption is that independent variable consists of two categorical, "related groups"; the first group consisting of the retrospective pre-test scores participants reported prior to beginning the program and the second related group consisting of the same participant's scores at the end of the program. The third assumption is that distribution of differences between the scores of both groups of the independent variable were checked for normal distribution using SPSS.

Qualitative Data Analysis

The study used a qualitative data analysis approach to condense raw data into categories or themes based on valid inference and interpretation (Glesne, 2016; Miles et al., 2020). Qualitative methods use an inductive approach to explore and understand individuals or groups to provide a rich holistic understanding of experiences, meanings, and stories (Tracy, 2013). The qualitive data used was participant stories in response to written prompts that asked them to first to describe the most significant changes (MSC) they experienced during their participation in the program and second to describe barriers to change that they experienced during their participation in the program.

The researcher included a second coder to control researcher bias and to include an additional perspective. The researcher and second coder used two coding cycles, the first using exploratory, holistic, and the second using descriptive line-by-line coding strategies to code participants responses for each prompt. After the second cycle when all the interviews were coded, the researcher began to sort out the major themes that addressed the third and fourth research questions: 1. What were the most significant changes (MSC) that LEP participants experienced due to their participation in the program? 2. What were the barriers to change that LEP participants experienced during their participation in the program?

Saldana describes the process of the "first cycle and the second cycle of coding," as codes are being re-formatted and renamed as different codes and themes emerge from the data (Saldaña, 2016). The first coding cycle had an exploratory purpose of identifying themes and patterns. The researcher and second coder independently coded all participant responses using exploratory, holistic coding during the first coding cycle. Exploratory coding was used when creating initial codes before refining and finalizing codes. Holistic coding, a form of exploratory coding, was used to encapsulate the overall idea of and possible categories. This process involved reading through each participant's response for prompt one and adding one code for each response that best describes the change noted by the participant. After completing holistic coding for all responses, the researcher and second coder came together to discuss the themes and codes to create the initial code book.

Emerging codes and themes were expected to arise during the initial coding and analysis. Therefore, additional codes were added to the codebook as codes emerged from the key themes in the second coding cycle. During the second coding cycle, the researcher and the second coder independently coded line-by-line to identify additional codes and themes. During this second coding cycle, the researcher and the second coder used descriptive coding to assign labels to data to summarize the basic topic of each line of data in a word or short phrase. The descriptive coding included descriptors about the facilitators to change and feelings experienced by the participants. The coding process was done first for the first prompt and the same process was repeated for the second prompt.

After completing line-line descriptive coding for all responses to both prompt 1 and prompt 2, the lead researcher combined the transcripts using Atlas.Ti and scheduled time to discuss patterns and observations with the second coder. The results were incorporated using

thematic analysis methodologies (Glesne, 2016; Smith et al., 1999). The *Appendices* include detailed instructions for the coding instructions used by the researcher and second coder, and the codebook used for qualitative and qualitative data analysis.

Synthesis and Triangulation

As described in Table 1, the unit of analysis was the individuals participating in the Leadership Equity Program. The base analysis were participant scores and themes of the individuals in the unit. Although data was collected at the participant level, the study used aggregates in the analysis, therefore unit of analysis was also the LEP Cohort group.

Table 1. Units of Analysis for the Leadership Equity Program

Research Question	Unit of Analysis	Variables	Method
What were LEP participants' reactions to the program regarding satisfaction, relevance, and utility?	LEP Participants	Satisfaction, relevance, utility	Survey Data – 5-point Likert Scale
Did LEP participants experience increased knowledge and skills due to their participation in the program?	LEP Participants	Knowledge and Skills	Retrospective Pre-post Survey Data 5-point Likert Scale
What were the most significant changes (MSC) that LEP participants experienced due to their participation in the program?	LEP Participants	Themes identified in Short Essay Stories	Qualitative Survey Data Themes
What were barriers to change that LEP participants experienced during their participation in the program?	LEP Participants	Themes identified in Short Essay Stories	Qualitative Survey Data Themes

Data coding and analysis for both datasets were aligned with the research questions. Quantitative and qualitative findings were integrated collaboratively using triangulation for final synthesis and interpretation. Denzin (1989) describes four kinds of triangulation – methodological, data, investigator, and theoretical. This study used methodological triangulation, which entails using various qualitative methods or a combination of qualitative and quantitative

methods (Grinnell and Unrau, 2005; Patton, 2002). For this research data triangulation was used to "enhance the rigor" of this study (Grinnell & Unrau, 2005; Kreuger et al., 2006; Rubin & Babbie, 2011; Shaw & Gould, 2001). The use of multiple methods also supported the analysis is providing a complete picture of the data and strengthened the findings by balancing the strengths and weaknesses of each method (Denzin, 1989).

Ethical Considerations

This study's design considered a range of ethical concerns, including anonymity, confidentiality, and informed consent (Richards, 2002; Sanjari et al., 2014). Protecting the confidentiality and anonymity of participants was of utmost importance. It was important to minimize risk for study participants, including intrusion of autonomy. (Sanjari et al., 2014) According to Richards and Schwartz (2002) findings, the term ‘confidentiality’ conveys different meanings for health care practitioners and researchers, and it is important to clarify confidentiality by elaborating on the form of outcome that might be expected from the study (Guillemin & Gillam, 2004; Richards, 2002). Anonymous data were collected from participants to reduce the connection of information that can identify the individual participant. Participants were also asked not to disclose the names or other identifiable information of a person or group when completing the survey and MSC questionnaire.

Informed consent is recognized as an integral part of ethical research. It begins with specifying to the participant in advance which data will be collected and how the data will be used (Hoeyer et al., 2005). Informed consent stresses the researcher's responsibility to thoroughly and comprehensively inform participants of different aspects of the research. (Sanjari et al., 2014) Participants did not pose any potential risks of harm or benefits since their data were

aggregated and used for evaluation, monitoring, and subsequent publications. It was also important to minimize any flaws in observation, therefore the researcher updated their investigation methodology and techniques as the study was carried out. (Sanjari et al., 2014)

As for data collection and storage procedures, quantitative and qualitative data collected in the program were handled securely and restricted to only those with permission to access the materials. Quantitative data were collected using survey monkey and all raw data, excel files, survey results, evidence of coding, and analysis records will be stored for a minimum of three years in a secure data platform under the California Primary Care Association. Qualitative data collected from MSC will be stored and analyzed using Atlas.Ti that provides reliable encryption and data protection.

Limitations

This study has limitations related to the methodology, sample, instrumentation, data collection process, and analysis. While some of these limitations are unavoidable, it is important to note strategies that were considered to minimize and mitigate the negative consequences of these limitations. As pointed out in the literature, the researcher should determine the most efficient research method based on the study's needs and available resources (Belotto, 2018).

One of the main limitations of qualitative research methodology is that there are several ways to do it correctly, making it more challenging to replicate (J. L. Campbell et al., 2013). However, this is an expected limitation of this unique research design that adds to the richness of the findings. Additionally, there is clear documentation of the systematic process for code development via a code book and a structured approach for inter-rater reliability development, which can be found in the Appendices. While the necessarily interpretive nature of this study is

hard to replicate, the clear structure in approach and audit trail demonstrates the reliability of the themes that emerged and the rigor of this study. Since this study is a mixed methods design, adding to the consistency and confidence of the overall study results.

The study sample also poses potential limitations since this design does not have a control group; therefore, the researcher did not compare the participants in this study with those who did not participate in the Leadership Equity Program. However, one can argue that human development, especially transformative development, does not work within the same frame of experimental design, and there are too many variables between the test and control group that it is not possible to isolate the intervention. Another limitation of this study is selection bias since the recruitment criteria used for the program were for individuals ready to develop skills to advance justice, equity, diversity, and inclusion (JEDI) which may have impacted their baseline scores. However, since all the individuals shared readiness to develop skills in JEDI, one can imply that they were all at least at the same or similar baseline as they began the program.

Another limitation is potential researcher bias since the lead researcher is directly associated with the program's assistant director. As a program staff intimately involved in this program, one of the study's limitations is researcher bias which involved the researcher consciously or unconsciously focusing on data supporting the researcher's existing beliefs and expectations. Controlling for this bias requires careful planning and constant vigilance when investigating the validity of each concept to ensure that the obtained results are complete and authentic representations (Mawell, 1996). Researcher bias was addressed by bringing in a second coder who was not associated with the program to control bias in interpretation, coding, and analysis.

A further tactic to prevent researcher bias was to assess the program's impact through the most significant change approach, by intentionally avoiding asking participants specific questions related to the elements and competencies in the program. If the questions were more targeted to specific program elements, the data may have been richer and more specific. However, following the Most Significant Approach allowed participants to define what was most salient for them in their experience.

The tension between inter-rater reliability and the rich interpretive potential of data is inherent in qualitative analysis. According to scholars, interrater reliability can improve the credibility and reliability of the results (Abowitz & Toole, 2010; Given, 2008; Zohrabi, 2013). While inter-rater reliability strengthens the reliability of the data with the relevant sources, it can negatively impact the nuance and flexibility of interpretation. This is particularly true when a second coder or research assistant is involved in coding the data that may not have the same level of knowledge and understanding about the study and, therefore, will not offer the same insight when coding (Morse, 1991, 1997). Morse (1997) explains that while "the study will become respectably reliable with an inter-rater reliability score, [it] will be achieved at the cost of losing all the richness and creativity inherent in analysis, ultimately producing a superficial product" (Morse, 1997) (p. 446). To resolve this tension between inter-rater reliability and the rich interpretive qualitative data, a looser inter-rater reliability was chosen to balance the qualitative analysis's interpretive nature.

Another limitation of this study is the early timeline of the program. In most cases, it takes some time before the impact of leadership development on workplace performance becomes evident. Outcomes measures for the program's long-term impact are beyond the timeframe of this study, therefore further data will need to be collected to assess the program's

impact, particularly for levels 3 and 4. As an innovative and new program that combines leadership development and justice, equity, diversity, and inclusion, there is the assumption that changes, and modifications will include the Leadership Equity program. Therefore, the evaluation remained flexible to such changes and refined the approach to ensure the best and most valuable data was collected.

IV. Chapter 4: Data Analysis and Results

Data were analyzed using a mixed-method concurrent triangulation design in which both quantitative data and quantitative data were collected and analyzed concurrently using methodological triangulation for final synthesis and interpretation. Qualitative data were transcribed, coded, and analyzed through inductive thematic analysis using ATLAS.ti, a qualitative analysis software. Thematic analysis was selected as a method of "identifying, analyzing, and reporting patterns (themes) within data" (Braun & Clarke, 2006; Castleberry & Nolen, 2018). Quantitative data were analyzed using a deductive approach using data collected from surveys that utilized a retrospective pre/post-test design to assess change in knowledge. Data coding and analysis for both datasets were aligned with the research questions. This design offered the opportunity to directly compare the quantitative statistical results collected from the survey data with qualitative findings from the Most Significant Change (MSC) technique to validate and expand on the results. Findings from the analysis are organized and described by the research questions aligned with the levels of evaluation in the Kirkpatrick Model.

Data Analysis

Level 1: Reaction and Satisfaction

The first research question, 1, explores the first level of the Kirkpatrick Model to assess the reaction and satisfaction of cohort participants. A series of questions were included in a survey provided to participants at the end of the program that assessed their reactions to the program's relevance, utility, and satisfaction. Over half of the participants reported the program had a high degree of relevance when asked if the program was relevant to their current position. As illustrated in *Figure 4*, 6 out of 10 participants (60%) felt the program was Very Relevant, 1

participant (10%) felt the program was Relevant, 2 participants (20%) felt the program was Moderately Relevant, 1 participant (10%) felt the program was Slightly Relevant. None of the participants (0%) felt the program was Not Relevant to their current position.

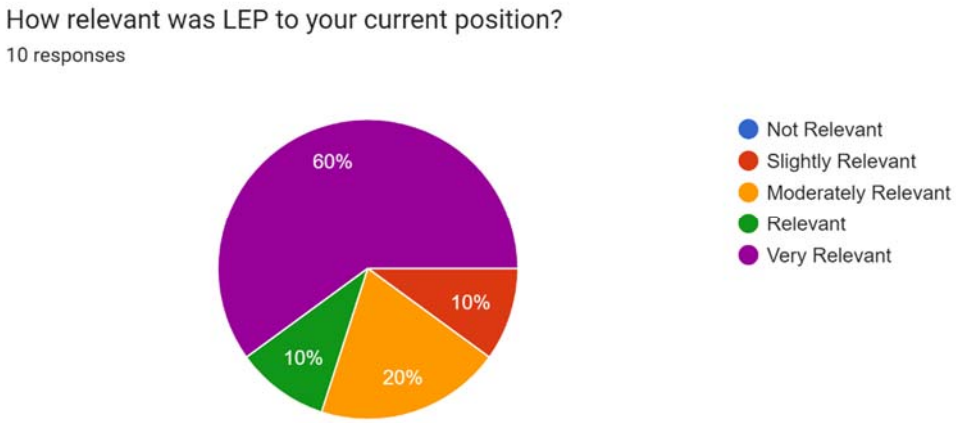


Figure 4. Survey Data - How Relevant Was LEP to Your Current Position

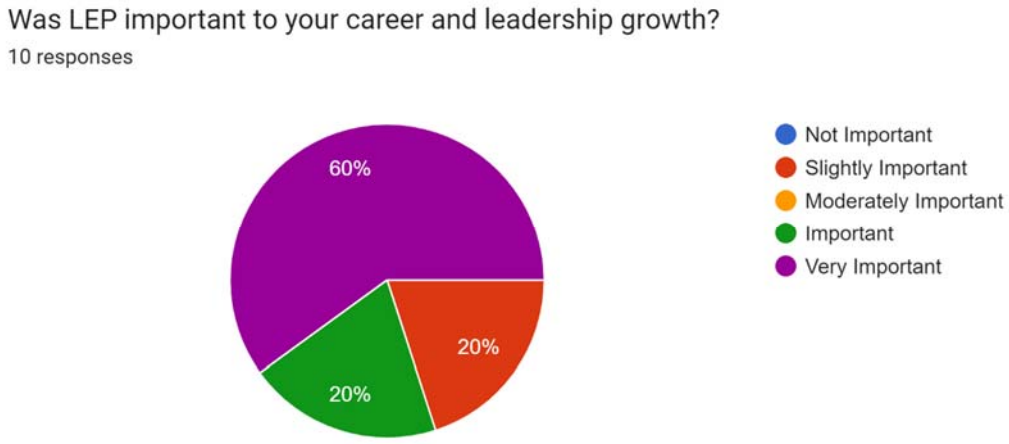


Figure 3. Survey Data - Was LEP Important to Your Career and Leadership Growth.

To assess the program's utility, participants were asked if they felt the program was important to their career and leadership growth. Like the results about the program's relevance, over half of the participants reported that the program was highly important to their professional

development. As illustrated in *Figure 5*, 6 of 10 participants (60%) felt the program was Very Important, 2 participants (20%) felt the program was Important, 2 participants (20%) felt the program was Slightly Important, none of the participants (0%) felt the program was Moderately Important. None of the participants (0%) felt the program was Not Important.

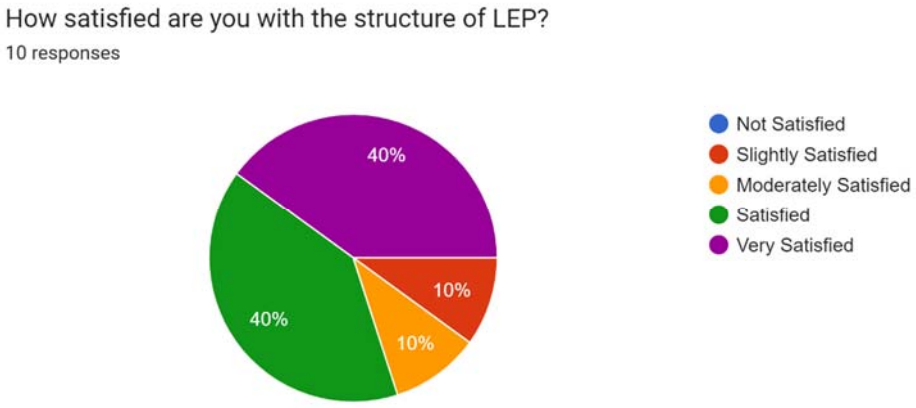


Figure 5. Survey Data - How Satisfied Are You with The Structure of LEP

When asked how about their satisfaction with the structure of the program, as illustrated in Figure 6, 4 of 10 participants (40%) reported they were Very Satisfied, 4 participants (40%) reported they were Satisfied, 1 participant (10%) reported being Moderately Satisfied, 1 participant (10%) reported being Slightly Satisfied. None of the participants (0%) were Not Satisfied with the program's structure.

When asked how about their satisfaction with the program content illustrated in *Figure 7*, 5 of 10 participants (50%) reported they were Very Satisfied, 3 participants (30%) reported they were Satisfied, 1 participant (10%) reported was Moderately Satisfied, and 1 participant (1%) was Not Satisfied. Unlike participants' satisfaction ratings in the program structure, in which all participants expressed different satisfaction levels, participants' satisfaction with the program

content was rated lower. It is important to note, one participant felt unsatisfied with the program content, which will be further described in Chapter 5.

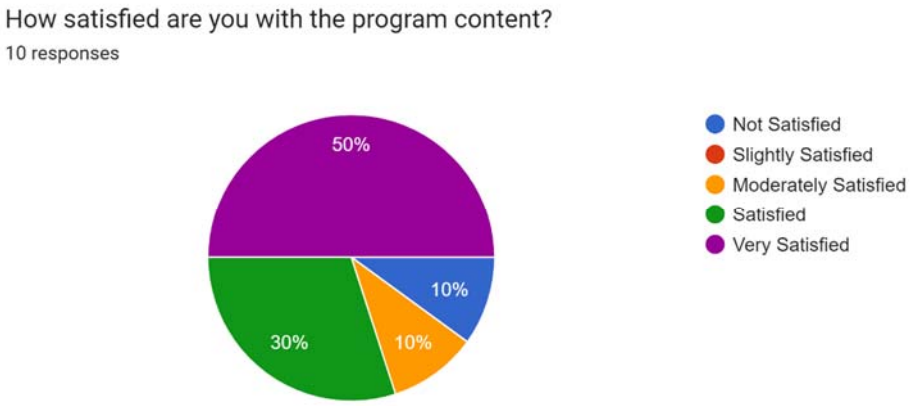


Figure 6. Survey Data - How Satisfied Are You with The Program Content

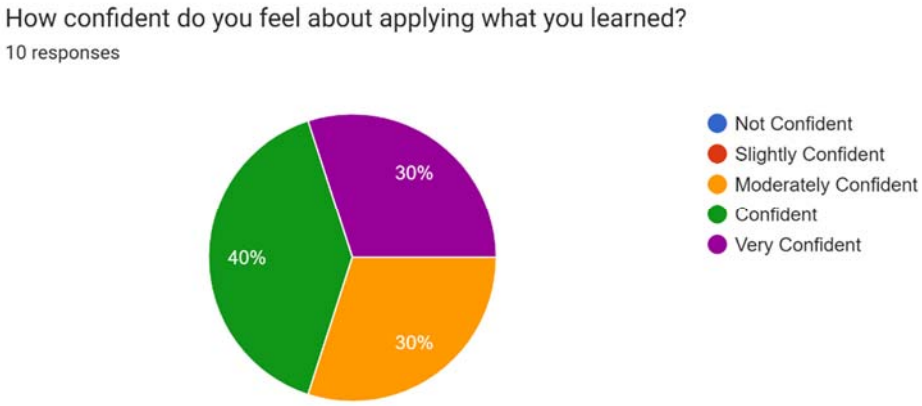


Figure 7. Survey Data - How confident do you feel about applying what you learned?

Overall, all participants reported feeling moderate or higher confidence in applying what they learned in the program. As illustrated in *Figure 8,* 3 of 10 participants (30%) reported they were Very Confident, 4 participants (40%) reported they were Confident, and 3 of 10

participants (30%) reported being Moderately Confident. None of the participants (0%) were Slightly Confident or Not Confident in applying what they learned in the program.

Level 2: Learning

The second research question assessed the second level of Kirkpatrick's model to determine whether LEP participants experienced increased knowledge and skills from participating in the program. A retrospective pre-post survey was used to assess participants' knowledge gains in the program's four learning target groups: 1. Anti-Racism & Racial Equity, 2. Leadership Development, 3. Community Well-Being, and 4. Health Center Operations. A Wilcoxon signed-rank test was used to analyze the survey data. The results showed that LEP did support a statistically significant change in knowledge for nearly all learning target groups.

Anti-Racism & Racial Equity

As reflected in Table 2, for the Anti-Racism & Racial Equity learning target group, all the learning targets coded as AR1-AR7 had a statistically significant change in pre and post-test scores. AR1 ($Z = -2.842$, $p = 0.004$), AR2 ($Z = -2.831$, $p = 0.005$), AR3 ($Z = -2.859$, $p = 0.004$), AR4 ($Z = -2.850$, $p = 0.004$), AR5 ($Z = -2.859$, $p = 0.004$), AR6 ($Z = -2.850$, $p = 0.004$), AR7 ($Z = -2.842$, $p = 0.071$). The median learning score rating was 2.5 before and 3.7 after the program.

Table 2. Change in Knowledge for Anti-Racism & Racial Equity Learning Targets

CODE	ANTI-RACISM & RACIAL EQUITY (AR)	Z	p
AR1	I can explain the correlation between racial trauma and the resulting health outcomes.	-2.842	0.004
AR2	I can explain the tenants of Isabel Wilkerson’s theory of the American caste system – a new framework to understand systemic racism.	-2.831	0.005
AR3	I can explain the correlation between provider implicit bias and the lower-quality health services.	-2.859	0.004
AR4	I can describe the health implications of black iatrophobia in the US.	-2.850	0.004

AR5	I can explain key concepts of intersectionality between race, gender, class, and other areas of social identity.	-2.859	0.004
AR6	I can formulate critical questions with teams I manage that connect antiracism with promoting health equity.	-2.850	0.004
AR7	I can formulate antiracist policies and practices that mitigate racial health disparities for targeted health outcomes.	-2.842	0.004

Leadership Development

The Leadership Development learning targets labeled LD1-LD8 in Table 3 all had a statistically significant change in pre and post-test scores. LD1 (Z = -2.850, p = 0.004), LD2 (Z = -2.879, p = 0.004), LD3 (Z = -2.877, p = 0.004), LD4 (Z = -2.842, p = 0.004), LD5 (Z = -2.850, p = 0.004), LD6 (Z = -2.889, p = 0.004), LD7 (Z = -2.836, p = 0.071), LD8 (Z = -2.850, p = 0.004). The median learning score rating was 2.0 before and 4.0 after the program.

Table 3. Change in Knowledge for Leadership Development Learning Targets

CODE	LEADERSHIP DEVELOPMENT (LD)	Z	p
LD1	I can describe how limiting beliefs hinder leadership effectiveness and impact.	-2.850	0.004
LD2	I can describe key strengths that drive career success	-2.879	0.004
LD3	I can use shared language to create allies	-2.877	0.004
LD4	I can explain concepts of inclusive leadership	-2.842	0.004
LD5	I can identify ways that unconscious bias manifests in the workplace.	-2.850	0.004
LD6	I can use core tenets of change management to navigate change skillfully.	-2.889	0.004
LD7	I can describe ways to mobilize various levels of the CHC organization to advocate for policies and practices centered on justice, equity, diversity, and inclusion (JEDI).	-2.836	0.005
LD8	I can develop practices that build relationships and coalitions with stakeholders that foster racial and health equity.	-2.850	0.004

Community Well-Being

The Community Wellbeing learning targets labeled CW1-CW6 in Table 4 all had a statistically significant change in pre and post-test scores. CW1 (Z = -2.859, p = 0.004), CW2 (Z = -2.848, p = 0.005), CW3 (Z = -2.842, p = 0.004), CW4 (Z = -2.859, p = 0.004), CW5 (Z = -2.848, p =

0.004), CW6 (Z = -2.859, p = 0.004). The median learning score rating was 3.0 before and 4.0 after the program.

Table 4. Change in Knowledge for Community Well-being Learning Targets

CODE	COMMUNITY WELL-BEING (CW)	Z	p
CW1	I understand that community conditions, at the local, state, and federal levels, are determinants of health and impact under-resourced communities.	-2.859	0.004
CW2	I can identify concrete opportunities to address racism, discrimination, and other forms of oppression my health center.	-2.848	0.004
CW3	I can form strategic partnerships with community groups to advance health equity.	-2.842	0.004
CW4	I can use storytelling and data to develop a balanced set of strategies to advance health equity.	-2.859	0.004
CW5	I can describe how building the well-being of people, places, and systems together will build equity.	-2.848	0.004
CW6	I can identify levers for change within my organization.	-2.859	0.004

Health Center Operations

The Health Center Operations learning targets labeled HCO1-HCO7 in Table 5 nearly all had a statistically significant change in pre and post-test scores with the exception of one learning target. HCO1 (Z = -1.897, p = 0.058), HCO2 (Z = -2.859, p = 0.004), HCO3 (Z = -2.859, p = 0.004), HCO4 (Z = -2.877, p = 0.004), HCO5 (Z = -2.879, p = 0.004), HCO6 (Z = -2.879, p = 0.004). The median learning score rating was 2.8 before and 3.5 after the program.

Table 5. Change in Knowledge for Health Center Operations Learning Targets

CODE	Health Center Operations (HCO)	Z	p
HCO1	I can deconstruct HR practices that contribute to racism, discrimination, and other forms of oppression in the workplace.	-1.897	0.058
HCO2	I can leverage data to sustain progress on diversity, equity, and inclusion (DEI) throughout the organization.	-2.859	0.005
HCO3	I can explain why healthcare payment is shifting away from fee-for-service.	-2.859	0.004
HCO4	I can describe the role of Accountable Care Organizations in value-based care.	-2.877	0.004
HCO5	I can identify new approaches to health center operations.	-2.879	0.004
HCO6	I can explain the importance of HIT as it pertains to improving equity in care delivery.	-2.879	0.004

Level 3: Behavior

The third research question assessed the Kirkpatrick Model's third level of evaluation, which involves translating gained knowledge and skills into behaviors or actions. The Most Significant Change (MSC) technique was used to evaluate changes in behavior by collecting participants' stories describing their most significant change during or resulting from participation in the program. AtlasTi software was used to analyze qualitative data that explored how participants used the program's training concepts and learning targets at the individual, organizational, community, systemic, and political levels. The researcher and second coder used two coding cycles, the first using exploratory, holistic, and the second using descriptive line-by-line coding strategies to code participants' responses and develop the codebook domains and themes described in Table 6. The themes were organized into five core domains; the first three grouped themes describe changes at the individual level, organizational level, and community level. The other two domains describe enablers and barriers to change.

The highest frequencies for behavior changes at the individual level were for “Confidence in Leadership” (6) and “Confidence in self” (7). The highest frequencies for “Barriers” to change were “Self-doubt” (5) and “Competing Priorities” (5). Interestingly “Self-doubt,” including fear of failure and perfectionism, were salient themes even as leaders grew in their confidence. This phenomenon in leader development is important for the program can consider addressing more directly. It is also important to consider the connection between confidence and self-efficacy as described in the literature. Confidence is a valuable characteristic in leadership development and learning, demonstrating certainty in decisions and communication style (Murphy & Johnson, 2016). A leader's confidence in themselves can also determine whether they strive for formal and informal leadership positions (Kirkpatick & Locke, 1991; Machida & Schaubroeck, 2011;

Murphy & Johnson, 2016). According to Bandura's (1986) social cognitive theory of motivation and behavior, self-efficacy is defined as an individual's belief in his or her abilities to achieve a certain level of performance (Bandura, 1986). Within the social cognitive theory, self-efficacy for specific tasks is vital in organizing behavior in conjunction with the person's goals, outcome expectations, and perceived facilitators and enablers. After controlling for performance, individuals high in self-efficacy for a given task will perform better than those low in self-efficacy (Bandura, 1997). As the LEP program impacts leaders' confidence, it can also support their self-efficacy and can have positive and long-term effects on their leadership trajectory.

Table 6. Themes for Self-Reported Most Significant Changes and Barriers

Domain	Theme	Frequency
Changes at the Individual Level	○ Aligning Personal and Professional Goals	2
	○ Awareness of Privilege and White Supremacy	2
	○ Awareness of Racial Equity	5
	○ Confidence in Leadership	6
	○ Confidence in Racial Equity	3
	○ Confidence in Self	7
	○ Confidence to Make a Difference	3
	○ Overcoming Self-limiting beliefs	2
	○ Self-reflection	5
	○ Self-renewal and Self-Care	3
	○ Transformation	1
Changes at the Organizational Level	○ Advancing JEDI Changes in the Organization	3
	○ Advancement to C-suite	1
Changes at the Community Level	○ Advancing Community Well-being	4
	○ Building Community Partnerships	4
Enablers	○ Appreciation for lived experience	2
	○ Capstone Opportunities	3
	○ Encouragement and Affirmation of Ideas	2
	○ Tools and Strategies	3
Barriers	○ Capstone Challenges	4
	○ Competing Priorities	5
	○ Feeling Disconnected	1
	○ Organizational Challenges	3
	○ Self-doubt	5
	○ Unfinished work	2

Results

Changes at the Individual Level

There were nine themes identified for the first domain that describes changes at the individual level. This domain not only had the most themes from the five domains but also had several themes that occurred at a higher frequency than the other domains. Unsurprisingly, individual changes were most frequently identified in the thematic analysis since the program being evaluated is a leadership development program that emphasizes change begins within the individual participant at the interpersonal and intrapersonal levels.

As shown in Table 7, the first theme for changes at the individual level involved increased awareness of privilege and white supremacy. Participants noted that the program supported their self-awareness of their privilege to be able to choose their doctor and deepened their awareness of how white supremacy has impacted them directly and their ways of thinking. According to the Harvard Business Review, there are two broad categories of self-awareness. The first category, internal self-awareness, "represents how clearly we see our own values, passions, aspirations, fit with our environment, reactions…, and impact on others." And the second category, external self-awareness, means understanding how other people view us regarding the same factors listed above. Research shows that people who have self-awareness, both internal and external, are more skilled at showing empathy and taking others' perspectives (Eurich, 2018). Participants also noted their awareness of racial equity increased as the program brought to light the root causes of inequities. Two participants also reported overcoming self-limiting beliefs because of the program. As a result, one participant was able to "break out of my fear of failure or rejection." For the theme "Aligning Personal and Professional Goals," two

participants noted becoming more effective at aligning their passion for equity with strategic or community goals. One participant noted their overall “transformation during the program.”

Table 7. Themes and Examples of Changes at the Individual Level

Domain: Changes at the Individual Level		
Theme	**Frequency**	**Quotation Examples**
Awareness of Privilege and White Supremacy	2	“I did not understand the true impact this has on someone that does not have a choice to choose their doctor. I have always had Kaiser so I could choose and change doctors any time I wanted. I had taken this for granted.” “I have grown in my understanding in the ways that white supremacy culture has impacted me directly and impacts my thinking.”
Awareness of Racial Equity	5	“The LEP program brought this racial equity to the light for me…” “I have gained awareness, knowledge and skill sets important to integrate JEDI into my work.” “It opened my eyes to the root causes of inequities that I thought I understood.”
Overcoming Self-limiting beliefs	2	“I learned that it's okay to take steps even if you can't see where you are going, and to also let go of some control and let things manifest the way they will organically.” “I could not have been moved to break out of my fear of failure or rejection without each of the main components [of the program].”
Aligning Personal and Professional Goals	2	“Through my LEP experience and the reading material assigned, I learned to be more effective in rooting my passion for this topic into strategic goals that mattered to our Org.” “What I discovered throughout LEP, with support from my cohort peers, guiding staff, and executive coach, was that it was okay for me to bring forth a project that both included the needs of people experiencing homelessness in my community and the desires of my own heart.”
Transformation	1	"My most significant story was my transformation during the program."

Table 8 continues to describe themes identified for changes at the individual level focused on improved confidence in leadership, racial equity, self, and confidence to make a difference. Participants noted increased confidence in “interacting with senior leaders” and “bringing people in.” Participants also described examples of how the program allowed them to gain “confidence in speaking on the topic of racial equity practices.” Other themes also emerged about participants gaining confidence to feel empowered, unique, resourceful, and advocate for

themselves. Participants also expressed a significant change in feeling they could make a difference in the lives of others and their community.

Table 8. Continued Themes and Examples of Changes at the Individual Level

Domain: Changes at the Individual Level		
Theme	**Frequency**	**Quotation Examples**
Confidence in Leadership	6	"I feel confident interacting with senior leaders…" "This story is significant to me because it showed me that I do have the skill set to bring people along, even if I am frustrated that an important topic doesn't seem to get the attention it needs…"
Confidence in Racial Equity	3	"I would say the most significant change I experienced in my participation in the LEP program was my confidence in speaking on the topic of Racial Equity practices in a way that encouraged my executive team to come along with me and buy into my capstone project."
Confidence in Self	7	"The Executive Coaching gave me tangible, short-term tasks that I could do to advocate for myself." "I am someone one, and I have a voice." "I am unique and resourceful." "LEP empowered me believe in myself and move forward with what I always wanted and had worked so hard on."
Confidence to Make a Difference	3	"There were a few changes I experienced participating in the Leadership Equity program, but the most significant change I had is I can make a difference." "By planting a seed or helping water another person's seed, I can make a difference."

Changes at the Organizational Level

Table 9 describes two key themes centered on behavioral changes that occurred at the organizational level due to the program. The first theme describes participant stories about ways the program supported them with tools to effectively integrate Justice, Equity, Diversity, and Inclusion practices into their work. One participant was able to "show that emending DEI/Racial equity practices/expectations is simply a best practice for achieving the Orgs goals and obligations." Other themes focused on organizational changes required to advance into the C-suite. One participant described developing a new job description for a Chief Equity Officer that

did not exist within the organization to gain buy-in from the organization and move into this position.

Table 9. Themes and Examples of Changes at the Organizational Level

Domain: Changes at the Organizational Level		
Theme	**Frequency**	**Quotation Examples**
Advancing JEDI Changes in the Organization	3	"I have gained awareness, knowledge and skill sets important to integrate JEDI into my work." "Through the tools I learned in LEP, I was able to show that emending DEI/Racial equity practices/expectations is simply a best practice for achieving the Orgs goals and obligations."
Advancement to C-suite	1	"I needed to develop the Chief Equity Officer job description and present the position to the C-suite as well as the Board of Directors. I plan to formally move into the role in 2023."

Changes at the Community Level

Table 10 describes themes of changes that occurred at the community level that describes opportunities the program offered for participants to "become proximate with the community." One theme that emerged was focused on advancing community well-being in which participants described ways they were able to work in their roles and organizations to bring "events to the community that allow housed and unhoused residents to come together." and create "more love and connection between housed and unhoused communities" as well as opportunities to "bring in new colleagues to be part of the story." Another theme focused on building community partnerships, in which participants expressed ways that they are or hope to bridge partnerships with colleagues and their community to drive health equity work.

Table 10. Themes and Examples of Changes at the Community Level

Domain: Changes at the Community Level		
Theme	**Frequency**	**Quotation Examples**
Advancing Community Wellbeing	4	"We are now bringing events to the community that allow housed and unhoused residents to come together to talk and learn from each other, so that there might be a sense of belonging for all" "It challenged me to break out of my comfort zone, become proximate with my community, and bring in new colleagues to be part of the story."
Building Community Partnerships	4	"My hope is to continue working with some of my former colleagues to continue to push for this initiative." "This led to me feeling like I had "permission" (though I really didn't need it) to focus on creating more love and connection between housed and unhoused communities."

Enablers for Change

Several enablers for change were identified by participants, which are described in Table 11. Two participants noted having a stronger appreciation for their lived experience and how this shapes their role as a leader. Three participants emphasized the value the program capstone had in acting as a compelling exercise of "deep reflection and renewal." Participants also noted the program gave them space to have their ideas encouraged and affirmed. Participants gained tools and strategies to apply within their organizations to advance initiatives centered on Justice, Equity, Diversity, and Inclusion (JEDI).

Table 11. Themes and Examples for Enablers

Domain: Enablers		
Theme	**Frequency**	**Quotation Examples**
Appreciation for lived experience	2	"Specifically, this program has reshaped how I view my role as a BIPOC female leader in the California healthcare system." "I have developed a profound appreciation for my own lived experience and how that informs who I am and how I show up as a leader."
Capstone Opportunities	3	"The most significant change story that I can link back to having participated in this program was the process of putting together, presenting, and reactions to my Capstone project." "Putting together the Capstone project was an exercise of deep reflection and renewal."
Encouragement and Affirmation of Ideas	2	"Not only was this idea given space, it was encouraged and affirmed." "An idea I had in mind from long before LEP was given space to come forward, even though it didn't look like the "shoulds" I had in my head."
Tools and Strategies	3	"All the LEP domains helped increase my awareness of various concepts/tools that helped me move forward our agency's JEDI efforts, and strengthen health center workforce pipeline efforts so community members had increased access to community health worker type roles at our member health centers." "It provided me with new tools and strategies to make an impact at any level." "Through the tools I learned in LEP, I was able to show that emending DEI/Racial equity practices/expectations is simply a best practice for achieving the Orgs goals and obligations."

As part of their response to describing their most significant story, participants were also asked to select the domain(s) where they felt the change or changes occurred within the four LEP Domains described in Table 12. Analogous to the findings from the MSC thematic analysis, the domain that was selected the most and had the most frequency was Doman #1: Individual Leadership Capacity. 5 participants noted that the most significant change also occurred in Domain # 2: Organizational Capacity, 7 participants stated the most significant change occurred at the in Domain #3: Community Well-being, and 4 or 40% of participants noted the most significant change occurred in Domain #4: Political and Systemic. It is important to note that not all participants who selected the domains as part of this portion of their response also write about

these changes in their story response that asked them to describe their most significant change during their participation in the program. Participants could also select one or more domains that pose some limitations to triangulating the data, which is further discussed in Chapter 5.

Table 12. In what LEP Domain(s) did the Change Occur

Domain	Description	Frequency
Domain #1: Individual Leadership Capacity	Increase awareness, Knowledge, and skills to champion anti-racism, racial equity, and well-being within CHC leadership roles and CHC operations.	9
Domain #2: Organizational Capacity	Strengthen CHC's capacity to recruit, retain and advance diverse leaders and expand organizational policies and practices centered on anti-racism, equity, and community well-being.	5
Domain #3: Community Well-Being	Advance place-based practices and community-based partnerships for collective action to advance health equity and community well-being.	7
Domain #4: Political and Systemic	Influence policies and systemic changes that advance equity and improve health outcomes for communities of color.	4

Barriers for Change

The fourth research question explores what barriers to change participants' experience during the program. Participants were asked to describe a change they wished to accomplish during the program but were unsuccessful. Participants were also asked to elaborate on why this story is significant and explain what some barriers were. Table 13 provides examples of the main themes identified at the individual, which were primarily around self-doubt, in which participants noted lacking self-confidence and struggled with fear of failure and perfectionism. One participant also noted feeling disconnected from being unable to attend the in-person sessions.

Table 13. Themes and Examples of Barriers

Domain: Barriers		
Theme	**Frequency**	**Quotation Examples**
Self-doubt	5	“The main barrier, however, was my own perfectionism and self-doubt” “It was difficult for me to take action without being able to see where I was going to end up, resulting in paralysis and even some avoidance to take action.” “I began the program feeling down on myself and not really knowing what was next in my leadership path.” “I did not have the self-confidence to take the next step and OWN what I knew about FQHC operations.”
Feeling Disconnected	1	"I also wasn't allowed to attend the in person LEP sessions so felt like I just got super behind and disconnected compared to others who had access to all sessions."

Table 14 continues to describe examples of themes of additional barriers expressed by participants. The three main barriers identified were some challenges in completing the capstone project, which was a core component of the program, having other competing priorities, and participants feeling like they had unfinished work after the program. Interestingly both themes also had some overlapping coding with the capstone theme.

Table 14. Continued Themes and Examples of Barriers

Domain: Barriers		
Theme	**Frequency**	**Quotation Examples**
Capstone Challenges	4	“I was hoping to complete my JEDI evaluation plan for my agency but didn't quite get there b/c it felt like I was working on 2 different projects - the project I was working on with my CPCA LEP coach helping me be accountable, and the separate capstone project. “I wish I was able to get further along in my Capstone than I did by the end of my participation in LEP.” “I wanted to be farther along than I was in my health equity capstone project by the end of LEP.”
Competing Priorities	5	“I wanted to be able to evaluate and make changes to our Community Outreach program. I wasn't able to do that, launch the Racial Equity Map work and do my current job responsibilities.”

		"I really wanted to have a system set up for indigenous language translation set up, but there were a lot more clinic and community partnerships that needed to be developed." "I encountered challenges that everyone faces, including personal needs and work demands."
Unfinished work	2	"While I did overcome these barriers by the end of LEP, it resulted in me not going as far as I wanted to by the end of the program." "I did not feel unsuccessful in this part, but I felt like I had unfinished business at my previous organization."

Table 15 provides examples of themes on the topic of organizational challenges in workforce diversity and challenges with business and clinical operations needed for Alternative Payment Methodologies (APM). One participant also noted that there had never been a position in their organization focused on diversity, equity, and inclusion, which posed some challenges in moving into this role within the C-suite.

Table 15. Continued Themes and Examples of Organizational Barriers

Domain: Barriers		
Theme	**Frequency**	**Quotation Examples**
Organizational Challenges	3	"One change that needs to be in place is recruiting doctors that look like the patients in the community. This has been a challenge to get new doctors to come to Community clinics. The barriers have been pay, location, and the number of patients per day." "Business model and clinical operation changes needed for APM." "I had hoped to move into the Chief Equity Officer role by the time I completed the LEP program. However, there has never been a position focused on diversity equity, and inclusion."

Participants were also asked to select the domain(s) where they felt the barriers to change occurred within the four LEP Domains described in Table 16. Comparable to findings from the MSC thematic analysis, the domain that had the most frequency was Domain #1: individual Capacity, selected by 7 participants, 4 of the participants selected Domain # 2: Organizational Capacity, 5 of participants selected Domain #3: Community Well-being, and 3 of participants

noted the most significant change occurred in Domain #4: Political and Systemic. Like the analysis for MSC, not all participants who selected the domains also wrote about these changes in their essay responses; therefore, not all themes were captured in the thematic analysis. Further limitations to triangulating the data are discussed in Chapter 5.

Table 16. In what LEP Domain(s) did the Barrier(s) Occur.

Domain	Description	Frequency
Individual Leadership Capacity	Increase awareness, Knowledge, and skills to champion anti-racism, racial equity, and well-being within CHC leadership roles and CHC operations.	7
Organizational Capacity	Strengthen CHC's capacity to recruit, retain and advance diverse leaders and expand organizational policies and practices centered on anti-racism, equity, and community well-being.	4
Community Well-Being	Advance place-based practices and community-based partnerships for collective action to advance health equity and community well-being.	5
Political and Systemic	Influence policies and systemic changes that advance equity and improve health outcomes for communities of color.	3

Table 17. Describe the triangulation of quantitative survey data analyzed using SPSS and qualitative MSC data analyzed using AtlasTi. The triangulation of the data facilitated data validation by cross-examining quantitative survey and qualitative data collected using the Most Significant Change technique. The results from triangulating the two data sets show consistent findings obtained through these different quantitative and qualitative data collection methods. While the survey data provided a numerical representation of four research questions for this study, the qualitative data collected elaborated and provided important contextual data to further support and expand on the findings. One limitation of triangulation data to examine research questions three and four was that only quantitative survey data assessed MSC and barriers to change at the political and systemic levels, and this level was not explicitly assessed using MSC.

Table 17. Triangulation of Data from Analysis using SPSS and AtlasTi

	Quantitative Survey Data Analyzed Using SPSS	Qualitative MSC Data Analyzed Using AtlasTi.
Research Question 1: What were LEP participants' reactions to the program regarding satisfaction, relevance, and utility?	9 or 10 program participants expressed positive satisfaction with the program structure, relevance, and utility. One participant expressed dissatisfaction with the program's content.	Themes regarding positive satisfaction with the program included the Tools and Strategies offered by the program, the Capstone experience, space created to appreciate their lived experience and affirm their ideas. Barriers and dissatisfaction with the program were mainly time constraints and competing priorities, and organizational challenges.
Research Question 2: Did LEP participants experience increased knowledge and skills due to their participation in the program?	In aggregate, the LEP cohort experienced a significant change in knowledge in 26 of the 27 program learning targets measured. The greatest change occurred for the curriculum learning targets on Antiracism and racial Equity, and Leadership Development.	Similar to SPSS findings from survey data showing the learning targets with the greatest change were on Antiracism and Racial Equity and Leadership Development, the most frequently reported knowledge and skills reported in qualitative data were focused on gaining tools and strategies to advance JEDI in organizations and to lead effectively.
Research Question 3: What were the most significant changes (MSC) that LEP participants experienced due to their participation in the program?	9 individuals noted their MSC at the Individual Level, 5 at the Organizational Level, 7 at the Community Level, and 4 at the Political and Systemic Level.	The most frequently noted MSC change at the individual level was increased confidence in self and confidence in leadership. The most frequently noted MSC change at the organizational level was advancing JEDI Changes in the Organization. The most frequently noted change at the community level was implementing Advancing Community Well-being and Building Community Partnerships.
Research Question 4: What were the barriers to change that LEP participants experienced during their participation in the program?	7 individuals reported barriers to change at the Individual Level, 4 at the Organizational Level, 5 at the Community Level, and 3 at the Political and Systemic Level.	The most frequently noted barrier to change at the individual level was self-doubt and competing priorities. The most frequently noted barrier at the organizational level was organizational challenges, including payment systems and competing priorities. No challenges were reported at the political or systemic level.

V. Chapter 5: Findings, Limitations, and Recommendations

In summary, this study used a mixed-method concurrent design to evaluate how participants in the inaugural Leadership Equity Program (LEP) cohort perceived the program achieved its objectives. This study addresses the need to evaluate the changes catalyzed by this new program at multiple system levels, including the organization and communities in which participants lead. This chapter presents the evaluation's findings, limitations, and recommendations to inform the continued evaluation of LEP and similar programs seeking to evaluate their efforts.

This study utilized Kirkpatrick's Model to evaluate the program against the model's four levels of criteria: reaction, learning, behavior, and results. First, using survey data, the study explored the reactions of the cohort participants regarding their satisfaction with the program structure and content and the relevance and utility of the program. Secondly, using quantitative data from retrospective pre-post surveys, the study assessed participants' learning and whether participants experienced increased knowledge and skills from participating in the program. Third, changes of behavior were evaluated using storytelling and the Most Significant Changes (MSC) technique, in which qualitative data were collected to identify themes highlighting the most significant changes and barriers to change that LEP participants experienced while participating in the program at the individual, organizational, community, and systemic levels. While the fourth level criteria for Kirkpatrick's Model focused on results was not assessed, given the data collection and program timeline, this chapter provides recommendations on ways the program results can be evaluated beyond this formative study.

Findings and Discussion

Level 1: Reaction

The first level of Kirkpatrick's Model evaluated participants' reactions to the program experience as it pertains to their satisfaction with the program structure and content, as well as participants' reactions to the relevance and utility of the program for their leadership development. Participants' satisfaction with the program structure and content was measured using a 5-point Likert scale survey. The results demonstrated a high percentage (80%) of participants were satisfied or very satisfied with both the program structure and program content, while a lesser percentage (20%) were slightly or moderately satisfied. Overall, the program achieved its first objective of offering a positive experience with a supportive structure and content that was relevant and useful for program participants. Additionally, while the Leadership Equity Program brings innovations in both the design and content, the high level of satisfaction with the structure may have been partly due to the program's design being informed and modeled by successful programs like the Clinic Leadership Institute and Health Management+ described in Chapter 2.

While no participants who completed the study's survey reported being dissatisfied with the program structure, there can still be opportunities for improvement. As the qualitative data results suggest, program satisfaction could be improved by addressing challenges with the time commitment and competing priorities experienced by cohort participants. Several participants indicated that the program workload was challenging to incorporate within their day-to-day operations. One participant also stated, "9 months is a long-time commitment to make for middle management. As noted in the literature review, similar programs have also found that program participants report time constraints challenges, so exploring how these programs addressed these

challenges would be helpful. Another opportunity to improve program satisfaction is by offering additional supportive structures that offer additional time to interact with peers and faculty. For example, one participant asked for more supportive opportunities through "More in-person time" and encouraging more "offline study" or "support groups."

While most participants were satisfied with the program content, one participant did indicate dissatisfaction, as reported in the quantitative survey data. When cross-examining with qualitative data for ways to improve the program content, some participants suggested focusing less on content about "social-justice and systematic racism" and "storytelling" and adding more content and technical assistance training on using tools to build "business case" and "return of investment." Considering this is a formative evaluation and the dynamic nature of CHC leaders are required to function in, it is important to continue to assess and tailor the program curriculum to meet these emerging needs. It is also important to consider how the program offers emerging executives a balanced experience that meets both needs identified by participants, which can be grouped as “tangibles,” such as more content and technical training, and the “intangibles,” such as self-empowerment, self-reflection, affirmation, etc., which were emphasized as critical in the qualitative data. The program can more explicitly describe how this program addresses both tangible and intangible needs for leader development and more explicitly describe when these different categories will be delivered, and perhaps even visually reflect what percentage of the training is technical and what percentage is deep work on self-reflection and empowerment.

The first level was also assessed by exploring the degree that participants felt the program had relevance and utility in their leadership development. According to survey data, 70% of participants felt the program was very relevant or relevant to their specific position, and 80% felt the program was very important or important to their career and leadership growth. No

participants indicated the program was relevant or important. As highlighted in themes that emerged from the qualitative data, one of the core feelings of relevance and utility that program participants noted was that the program affirmed their lived experiences and how they viewed themselves as leaders. Considering leadership development is a dynamic process that connects an individual's experience with their present and future aspirational identities, this affirming process was a significant change noted by several participants. Participants indicated that affirming their lived experiences enabled them to connect authentically to who they are and how they show up as leaders. This theme is developmentally significantly as it affects the manner and depth to which participants will engage and learn and confirms the need for and importance of that inner development.

An important consideration for relevance is being able to customize and offer a program experience that still meets the broad array of distinct positions, levels of experience, and professional goals of participants. For example, not everyone participating in the program may be interested in moving into an executive role soon after completing the program. Leadership growth could also be defined differently and not easily measured since not all participants were interested in or ready to move into an executive role immediately. These are important considerations for why this formative and potential developmental evaluation should remain adaptable to program participants needs and program measurement priorities.

Level 2: Knowledge and Skills

The second level of criteria evaluated participants' change in knowledge and skills after the program. Results from the retrospective pre-post survey showed that while participants started the program with some knowledge and skills, knowledge did increase significantly for nearly all

curriculum learning targets post their participation in the program. Participants indicated that the knowledge and skills gained were beyond self-growth, and they were able to apply their knowledge and skills to impact their organizations and communities in meaningful ways that advance equity and well-being. While health center operations had the lowest level of change in learning, this may be because the LEP participants function daily in their roles in health center operations and may have more direct opportunities to learn through applied experience. Whereas the highest level of change in learning was for learning targets centered on anti-racism, which shows this area of learning may not be as easily accessible and gained in the environment that participants function. Therefore, there is a need to provide emerging executive leaders with further opportunities to develop and apply the topic of anti-racism and racial equity.

As a formative evaluation, another important consideration for continued evaluation efforts and program development is to stay tuned for opportunities to adapt the curriculum to continue supporting participant learning in the dynamic changes in the community health center field, particularly concerning policy and payment reform changes. Qualitative data results indicated participants requested more opportunities for applied learning in alternative payment methodologies, advocacy, and building a business case return of investment for health equity efforts. Participants also expressed that the program provided opportunities to support leader development learning to increase awareness, confidence, and self-empowerment and develop leadership development to increase capacity and include the lived experiences of community members in leading collectively.

Another challenge to consider for evaluation learning is from the organizational level, and community impacts cohort participants are making due to this learning. At an organizational level, supervisors and other staff were a great resource for information about the cohort

participants' impact and applied knowledge. This could be done, for example, by using 360 assessment tools (Hannum et al., 2017) Some important considerations to evaluate the application of learning as reported by the participant's supervisors or colleagues are time constraints and how challenging it may be to engage them directly in standard data collection approaches such as surveys and interviews. Additionally, LEP alumni transition into new roles or organizations, and they may no longer engage with their sponsoring supervisor, providing some challenges to get a consistent picture of their learning journey and trajectory.

Level 3: Behavior

Data collected using MSC also demonstrated the program supported individuals to build organizational make an institutional commitment to advancing Justice, Equity, Diversity, and Inclusion (JEDI) both internally within their teams and externally in how care is approached and delivered. While the data collected indicated that some benefit behavioral changes at the organizational and community level may, external measures did not validate these perceptions from the cohort participants. This presents new opportunities for further research. Additionally, not all the behavioral changes noted by participants were at the organization or community level; therefore, assessing the true impact of the program in terms of level 4 results was not possible.

Findings from this study show greater gains and impacts at the organizational and community levels, particularly the community well-being and anti-racism and racial equity learning targets, with critical for program participants to feel they have the knowledge and tools to advance health equity. Participants shared some behavioral and leadership activities that demonstrated the application of the learning and skills within their organizations, communities, and systems. Additionally, as the program continues to evolve and expand, sustaining program

impacts at the organizational, community, and systemic levels will require the program to involve community members and organizations more directly in evaluative and program development efforts. This could begin by developing continued check-ins with individuals and organizations participating in the program and involving community representatives and past alumni in advising the development of the program. The alumni network is important to consider as an added outcome of deeper development in LEP alumni and points to long-term development of the program if participants return to engage as alumni.

Limitations

This evaluation had limitations in the study's design, the data collection instrument and process, and the data analysis. As noted in the previous chapters, there were potential limitations in the study's design since it was conducted in an uncontrolled environment without a control group. Therefore, there was no way to compare participants who did and did not participate in the Leadership Equity Program. It was impossible to do a controlled study since, methodologically, this was a study of a complex process embedded in complex contexts. By its very nature, this was not controllable since it was a study of complex, emerging, and transformative development in a rich context of leadership. The design can also be challenging to replicate given the uniqueness of the program participants and the many ways data mixed method collection can be conducted (J. L. Campbell et al., 2013). However, these limitations in the study design are validated given the goals and formative nature of the study and the program's complexity, which adds to the richness of the findings.

Additionally, because of the uncontrolled nature of the study, the researcher could not control the external factors impacting the program and, therefore, could not determine the impact that specific program components had on participants. While this evaluation did not assess the impact of specific program components on participants, future evaluation goals can explore the dosage that participants were exposed to these different curriculum components and competencies during their time in the program. One way to consider dosage is by analyzing the content covered in the sixteen virtual sessions to determine how much time was spent on each topic and learning target and whether the time was spread evenly. Some areas that will not be as well quantified include in-person meetings, coaching time, and independent study.

The study also had some limitations in the design of the data collection instrument and process used to collect data since all data was administered using one questionnaire to capture both the pre-post retrospective survey data and qualitative data for the most significant changes and barriers to change. Using one data collection instrument can result in respondent fatigue which "occurs when survey participants become tired of the survey task, and the quality of the data they provide begins to deteriorate (Lavrakas, 2008)." Another important consideration is the order in which participants are asked the questions to avoid "order effects bias," which is a type of response bias where a respondent may react differently to questions based on the order in which questions appear in a survey or interview. While it may have been ideal to administer the data collection in several stages to prevent respondent fatigue and order effects bias, this process was given the data collection and timeline for the program. Additionally, administering the data collection in separate stages would have risked a lower participant response rate since participants would be less likely to respond too long after completing the program or offer the same quality of reflection. To address the limitations in the data collection instrument and

process, the researcher reduced the number of questions to only the most essential questions necessary to evaluate learning from the program curriculum and goals of the study. To address survey bias, the researcher changed the order of the questions - starting with the reflections on the most significant change and barriers to change, followed by the rest of the survey questions ended to participants would not be biased by the responses in the survey portion of the questionnaire.

During the data collection and analysis phase, selection and response bias may have also impacted the study. For example, the individuals recruited for the program were likely to have a higher level of knowledge and readiness to advance justice, equity, diversity, and inclusion, which may have impacted their baseline scores. Another limitation of this study is the low response rate to the survey, in which only 10 of the 16 cohort participants completed the survey. Some studies argue that a low response rate may produce response bias in which the prevalence estimates are biased by selective non-response (Meiklejohn et al., 2012). Other studies argue that while high response rates are desirable because of precision and power, the results from "low" response-rate surveys may still accurately represent attitudes of the population and should not be cited as reasons to dismiss results as uninformative (Meterko et al., 2015). Additionally, it is important to note that response rate is a more important consideration in larger quantitative studies with a high “n” value. For this small qualitative study of 16 participants, the surveys were used as information-gathering tools to meet data needs which mitigate the potential issues identified and offer more credibility to the results.

At the analysis stage, it was also important to control researcher bias since the lead researcher is also the assistant director of the program being evaluated. Researcher bias was addressed by bringing in a second coder not associated with the program to control bias in

interpretation, coding, and analysis. While the program was exposed to some biases, including researcher, selection, and response bias, these limitations were justified and unavoidable given the aims of the program and evaluation design. While some of the limitations in this evaluation study are unavoidable, the researcher attempted strategies to minimize and mitigate the negative consequences of these limitations. As pointed out in the literature, it is important to determine the most efficient research method based on the study's needs and available resources (Belotto, 2018).

Recommendations

As a formative evaluation, several important lessons emerged from the inaugural cohort of the Leadership Equity Program and recommendations as the program continues to evolve and advance its vision to collectively strengthen CHCs' capacity to achieve just, healthy, and equitable communities across California. The program's vision is supported by its theory of change, focused on equipping the next generation of community health center leaders with the knowledge, skills, and passion to co-create systems of justice and equity in their communities. As indicated by both quantitative and qualitative data, one of the greatest challenges described by participants in the inaugural program was time and competing priorities. Some participants felt they had unfinished work, particularly as it pertained to the capstone. A recommendation to address this challenge would be to more effectively engage the executive sponsor to set expectations for program requirements, including time and financial commitments, to ensure sponsors protect participants' time for program participation.

As the program continues to evolve, more intentional support and facilitation will also be needed to foster the social networks created in the program. This can include developing ways to

maintain a participant and alumni network. While some networks may continue to grow organically, it is important to monitor and respond to program participants' needs. For example, creating communication challenges and events for participants to come together. Additionally, the program can offer opportunities for alumni to act as mentors or navigators for the next cohort.

While the program did not collect data specifically for level 4 (results) of Kirkpatrick's model since organizational results from the program are usually evaluated several months or years after the program. Collecting data for this level could include conducting focus groups with executive teams and cohort participants to share qualitative data on how the program advanced change in the organization and communities. While the program may not expect to see its system impact several years later, it is important to begin developing methods to collect data longitudinally from each cohort participant, participating sponsor organizations, and communities. This could include continuing an alumni survey and key informant interviews with participants as they advance in their leadership journey. Additionally, the program could conduct a content analysis of the program capstones, which were the core and tangible results of the program. As part of a developmental evaluation and assessing participants' behavioral changes, it is important to consider collecting other external measures that validate the perceptions reported by participants. This can include speaking to leaders within their organization and community members, who can validate and further contextualize these changes. Given the complexity and systemic approach of the program, continuing to refine the Leadership Equity Program's logic model and theory of change framework will build a solid foundation for continuing to measure and evaluate the program's impact. As noted in the literature, most evaluation of leadership development programs is focused on short-term and individual-level outcomes, and only limited

programs have evaluated long-term societal impact. Additionally, evaluation metrics typically do not include the impacts on and benefits for the sponsor organizations and communities. Limitations in evaluating leadership development programs result from not having well-articulated program theories of change and logic models (Njah et al., 2021). It will be necessary for the Leadership Development Program to develop a logic model and theory of change that can function as a systematic visual model and narrative about how, why, and under what conditions the program's activities are expected to bring about the intended changes in outcomes.

Conclusion

In conclusion, this formative evaluation demonstrated that the Leadership Equity Program successfully reached its immediate goals in the first year of implementation to impact change at the individual level and build capacity in the organizational, community, and system levels critical to advancing health equity and community well-being. This study set an important foundation for identifying barriers and opportunities. This study also informs continued evaluative efforts to advance the program's vision and identify ways this program can catalyze collective and collaborative leadership to promote Justice, Equity, Diversity, and Inclusion in CHC organizations and communities. The study findings extend the leadership literature on how leadership development programs can advance diverse leaders who can create and sustain environments that advance health equity.

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Appendices

Appendix A: Leadership Equity Program Questionnaire

Dear LEP Participant,

You are invited to participate in the LEP Program Completion Questionnaire. This questionnaire intends to gather valuable insights and feedback from you from the beginning of your journey at the beginning of the program in January 2022 to the completion of the program in November 2022.

The questionnaire will also allow the LEP team to compile shared information to create a holistic snapshot of how you in the inaugural cohort experienced the program and inform the further development of the program for future cohorts. Your responses are valuable for the continuous improvement and development of our program and will inform the following:

- To identify areas that need improvement.
- To learn what has already been achieved.
- To help understand what is important to you.
- To acknowledge and share what has already been achieved.

Your individual responses will be kept confidential and only shared in aggregate form.

The questionnaire will take approximately 30 minutes to complete. Please complete the LEP Program Completion Questionnaire by Sunday, November 20, 2022, at 11:59 PM PST.

If you have any questions, please email Lizbeth Bayardo at lbayardo@cpca.org.

Follow this link to the questionnaire:

Take the Questionnaire

Or copy and paste the URL below into your internet browser: (link TBD)

CONSENT INFORMATION

ELIGIBILITY: To participate, you must have participated in Cohort 1 of the Leadership Equity Program.

VOLUNTEER PARTICIPATION: Your participation is entirely voluntary. You may stop or refuse to answer any particular question for any reason at any time without it being held against you.

RISKS OF PARTICIPATION: Volunteering to participate involves no more risk than what a typical person experiences on a regular day.

BENEFITS OF PARTICIPATION: We do not expect there to be a benefit to you personally. The information collected in this questionnaire is intended to benefit future program participants and other similar programs.

CONFIDENTIALITY: Your individual privacy will be protected. We may use the data we collect for evaluation and publication purposes, but we will not reveal your identity. All names and any identifying information will be removed if included anywhere in the questionnaire to protect the privacy and confidentiality of your responses,

CONSENT: By checking the checkbox below, you are indicating that you understand the information on this form, that someone has answered any and all questions you may have about this questionnaire, and you voluntarily agree to participate in it.

Name: _____ Date _____

Yes, I consent.

No, I do not consent.

SECTION 1: SATISFACTION

Please provide feedback on how well the program met your needs and expectations.

1. Was LEP relevant to your current position?

    - o Not Relevant
    - o Slightly Relevant
    - o Moderately Relevant
    - o Relevant
    - o Very Relevant

2. Was LEP important to your career and leadership growth?

    - o Not Important
    - o Slightly Important
    - o Moderately Important
    - o Important
    - o Very Important

3. Will you recommend LEP to others?

    - o Will not Recommend
    - o Probably will not Recommend
    - o Probably will recommend
    - o Will Recommend
    - o Will Highly Recommend

4. How satisfied are you with the structure of the program?

    - o Not Satisfied
    - o Slightly Satisfied
    - o Moderately Satisfied
    - o Satisfied
    - o Very Satisfied

5. How satisfied are you with the program content?

    - o Not Satisfied
    - o Slightly Satisfied
    - o Moderately Satisfied
    - o Satisfied
    - o Very Satisfied

SECTION 2: LEARNING

Please provide feedback on your learning and skills before and after the program as it pertains to the program's learning objectives for the following core curriculum components: 1. Anti-Racism & Racial Equity 2. Leadership Development, 3. Community Wellbeing 4. Health Center Operations.

Please rate your level of Knowledge of the following learning targets BEFORE (Starting LEP) and NOW (Completing LEP)

1 No Knowledge (new concept to me)
2 Minimal Knowledge (little bit of experience)
3 Moderate Knowledge (some experience)
4 Advanced Knowledge (a lot of experience)
5 Significant Knowledge (significant experience and skill to share with others)

ANTI-RACISM & RACIAL EQUITY

1. I can explain the correlation between racial trauma and the resulting health outcomes.

	No Knowledge	Minimal Knowledge	Moderate Knowledge	Advanced Knowledge	Significant Knowledge
BEFORE (Starting LEP)	o	o	o	o	o
NOW (Completing LEP)	o	o	o	o	o

2. I can explain and understand the tenants of Isabel Wilkerson's theory of the American caste system – a new framework to understand systemic racism.

	No Knowledge	Minimal Knowledge	Moderate Knowledge	Advanced Knowledge	Significant Knowledge
BEFORE (Starting LEP)	o	o	o	o	o
NOW (Completing LEP)	o	o	o	o	o

3. I can explain the correlation between provider implicit bias and the lower-quality health services Black people experience.

	No Knowledge	Minimal Knowledge	Moderate Knowledge	Advanced Knowledge	Significant Knowledge
BEFORE (Starting LEP)	o	o	o	o	o
NOW (Completing LEP)	o	o	o	o	o

4. I explain the historic racial origins and health implications of black iatrophobia.

	No Knowledge	Minimal Knowledge	Moderate Knowledge	Advanced Knowledge	Significant Knowledge
BEFORE (Starting LEP)	o	o	o	o	o
NOW (Completing LEP)	o	o	o	o	o

5. I can explain the historic origins of structural and systemic racism within California.

	No Knowledge	Minimal Knowledge	Moderate Knowledge	Advanced Knowledge	Significant Knowledge
BEFORE (Starting LEP)	o	o	o	o	o
NOW (Completing LEP)	o	o	o	o	o

6. I can explain key concepts of intersectionality between race, gender, class, and other areas of social identity.

	No Knowledge	Minimal Knowledge	Moderate Knowledge	Advanced Knowledge	Significant Knowledge

BEFORE (Starting LEP)	o	o	o	o	o
NOW (Completing LEP)	o	o	o	o	o

7. I can formulate and pose critical questions that facilitate deep thinking about antiracist ideas that promote health equity with the teams I manage.

	No Knowledge	Minimal Knowledge	Moderate Knowledge	Advanced Knowledge	Significant Knowledge
BEFORE (Starting LEP)	o	o	o	o	o
NOW (Completing LEP)	o	o	o	o	o

8. I can connect the historic origins of healthcare disparities and their impact on creating organizational limitations inconsistent with equity and inclusion.

	No Knowledge	Minimal Knowledge	Moderate Knowledge	Advanced Knowledge	Significant Knowledge
BEFORE (Starting LEP)	o	o	o	o	o
NOW (Completing LEP)	o	o	o	o	o

9. I can connect the historic origins of structural and systemic racism and individual behaviors and attitudes preventing individual and community self-care.

	No Knowledge	Minimal Knowledge	Moderate Knowledge	Advanced Knowledge	Significant Knowledge
BEFORE (Starting LEP)	o	o	o	o	o

NOW (Completing LEP)	o	o	o	o	o

10. I can formulate antiracist policies and practices that mitigate racial health disparities for targeted health outcomes.

	No Knowledge	Minimal Knowledge	Moderate Knowledge	Advanced Knowledge	Significant Knowledge
BEFORE (Starting LEP)	o	o	o	o	o
NOW (Completing LEP)	o	o	o	o	o

A. LEADERSHIP DEVELOPMENT

1. I can describe how limiting beliefs hinder leadership effectiveness and impact.

	No Knowledge	Minimal Knowledge	Moderate Knowledge	Advanced Knowledge	Significant Knowledge
BEFORE (Starting LEP)	o	o	o	o	o
NOW (Completing LEP)	o	o	o	o	o

2. I can describe key strengths and assets that drive career success and awareness (and decrease) the self-defeating thoughts and behaviors that undermine visioning and success.

	No Knowledge	Minimal Knowledge	Moderate Knowledge	Advanced Knowledge	Significant Knowledge
BEFORE (Starting LEP)	o	o	o	o	o
NOW (Completing LEP)	o	o	o	o	o

3. I can identify common goals and use shared language to create allies.

	No Knowledge	Minimal Knowledge	Moderate Knowledge	Advanced Knowledge	Significant Knowledge
BEFORE (Starting LEP)	o	o	o	o	o
NOW (Completing LEP)	o	o	o	o	o

4. I can explain concepts of inclusive leadership and adaptive practices.

	No Knowledge	Minimal Knowledge	Moderate Knowledge	Advanced Knowledge	Significant Knowledge
BEFORE (Starting LEP)	o	o	o	o	o
NOW (Completing LEP)	o	o	o	o	o

5. I can identify ways that unconscious bias manifests in the workplace and how it can be addressed.

	No Knowledge	Minimal Knowledge	Moderate Knowledge	Advanced Knowledge	Significant Knowledge
BEFORE (Starting LEP)	o	o	o	o	o
NOW (Completing LEP)	o	o	o	o	o

6. I can use core tenets of change management to navigate change skillfully.

	No Knowledge	Minimal Knowledge	Moderate Knowledge	Advanced Knowledge	Significant Knowledge
BEFORE (Starting LEP)	o	o	o	o	o
NOW (Completing LEP)	o	o	o	o	o

7. I can describe the nuances of organizational culture and its connection to other elements of an organization.

	No Knowledge	Minimal Knowledge	Moderate Knowledge	Advanced Knowledge	Significant Knowledge
BEFORE (Starting LEP)	o	o	o	o	o
NOW (Completing LEP)	o	o	o	o	o

8. I can explain the roles of policymakers in the legislative and budget process to leverage and advance health equity.

	No Knowledge	Minimal Knowledge	Moderate Knowledge	Advanced Knowledge	Significant Knowledge
BEFORE (Starting LEP)	o	o	o	o	o
NOW (Completing LEP)	o	o	o	o	o

9. I can describe ways to mobilize various levels of the CHC organization to advocate for policies and practices centered on justice, equity, diversity, and inclusion (JEDI).

	No Knowledge	Minimal Knowledge	Moderate Knowledge	Advanced Knowledge	Significant Knowledge
BEFORE (Starting LEP)	o	o	o	o	o
NOW (Completing LEP)	o	o	o	o	o

10. I can develop practices that build relationships and coalitions with stakeholders that foster racial and health equity.

	No Knowledge	Minimal Knowledge	Moderate Knowledge	Advanced Knowledge	Significant Knowledge

BEFORE (Starting LEP)	o	o	o	o	o
NOW (Completing LEP)	o	o	o	o	o

COMMUNITY WELL-BEING

1. I understand that community conditions, at the local, state, and federal levels, are determinants of health and impact under-resourced communities.

	No Knowledge	Minimal Knowledge	Moderate Knowledge	Advanced Knowledge	Significant Knowledge
BEFORE (Starting LEP)	o	o	o	o	o
NOW (Completing LEP)	o	o	o	o	o

2. I can identify how structural racism informs the policy and behaviors of my community health center or organization.

	No Knowledge	Minimal Knowledge	Moderate Knowledge	Advanced Knowledge	Significant Knowledge
BEFORE (Starting LEP)	o	o	o	o	o
NOW (Completing LEP)	o	o	o	o	o

3. I can identify concrete opportunities to address structural racism in my health center.

	No Knowledge	Minimal Knowledge	Moderate Knowledge	Advanced Knowledge	Significant Knowledge
BEFORE (Starting LEP)	o	o	o	o	o

NOW (Completing LEP)	o	o	o	o	o

4. I can form strategic partnerships with community groups to advance health equity.

	No Knowledge	Minimal Knowledge	Moderate Knowledge	Advanced Knowledge	Significant Knowledge
BEFORE (Starting LEP)	o	o	o	o	o
NOW (Completing LEP)	o	o	o	o	o

5. I can use storytelling and data to develop a balanced set of strategies to advance health equity.

	No Knowledge	Minimal Knowledge	Moderate Knowledge	Advanced Knowledge	Significant Knowledge
BEFORE (Starting LEP)	o	o	o	o	o
NOW (Completing LEP)	o	o	o	o	o

6. I can describe how building the well-being of people, places, and systems together will build equity.

	No Knowledge	Minimal Knowledge	Moderate Knowledge	Advanced Knowledge	Significant Knowledge
BEFORE (Starting LEP)	o	o	o	o	o
NOW (Completing LEP)	o	o	o	o	o

7. I can describe the impact of structures and systems that drive racial and other structural inequities.

	No Knowledge	Minimal Knowledge	Moderate Knowledge	Advanced Knowledge	Significant Knowledge

BEFORE (Starting LEP)	o	o	o	o	o
NOW (Completing LEP)	o	o	o	o	o

8. I can identify levers for change within my organization, community, and societal systems.

	No Knowledge	Minimal Knowledge	Moderate Knowledge	Advanced Knowledge	Significant Knowledge
BEFORE (Starting LEP)	o	o	o	o	o
NOW (Completing LEP)	o	o	o	o	o

9. I can form a health equity team within my organization and with community partners.

	No Knowledge	Minimal Knowledge	Moderate Knowledge	Advanced Knowledge	Significant Knowledge
BEFORE (Starting LEP)	o	o	o	o	o
NOW (Completing LEP)	o	o	o	o	o

HEALTH CENTER OPERATIONS

1. I can deconstruct HR practices that contribute to racism in the workplace.

	No Knowledge	Minimal Knowledge	Moderate Knowledge	Advanced Knowledge	Significant Knowledge
BEFORE (Starting LEP)	o	o	o	o	o

NOW (Completing LEP)	o	o	o	o	o

2. I can describe different components that make equitable employee onboarding a success.

	No Knowledge	Minimal Knowledge	Moderate Knowledge	Advanced Knowledge	Significant Knowledge
BEFORE (Starting LEP)	o	o	o	o	o
NOW (Completing LEP)	o	o	o	o	o

3. I can leverage data to sustain progress on diversity, equity, and inclusion (DEI) throughout the organization.

	No Knowledge	Minimal Knowledge	Moderate Knowledge	Advanced Knowledge	Significant Knowledge
BEFORE (Starting LEP)	o	o	o	o	o
NOW (Completing LEP)	o	o	o	o	o

4. I can explain why healthcare payment is shifting away from fee-for-service.

	No Knowledge	Minimal Knowledge	Moderate Knowledge	Advanced Knowledge	Significant Knowledge
BEFORE (Starting LEP)	o	o	o	o	o
NOW (Completing LEP)	o	o	o	o	o

5. I can describe value-based care and the role of Accountable Care Organizations.

	No Knowledge	Minimal Knowledge	Moderate Knowledge	Advanced Knowledge	Significant Knowledge

BEFORE (Starting LEP)	o	o	o	o	o
NOW (Completing LEP)	o	o	o	o	o

6. I can describe accountable care organization financial models.

	No Knowledge	Minimal Knowledge	Moderate Knowledge	Advanced Knowledge	Significant Knowledge
BEFORE (Starting LEP)	o	o	o	o	o
NOW (Completing LEP)	o	o	o	o	o

7. I can identify key challenges and new approaches to health center operations.

	No Knowledge	Minimal Knowledge	Moderate Knowledge	Advanced Knowledge	Significant Knowledge
BEFORE (Starting LEP)	o	o	o	o	o
NOW (Completing LEP)	o	o	o	o	o

8. I can explain the importance of HIT as it pertains to improving equity in care delivery.

	No Knowledge	Minimal Knowledge	Moderate Knowledge	Advanced Knowledge	Significant Knowledge
BEFORE (Starting LEP)	o	o	o	o	o
NOW (Completing LEP)	o	o	o	o	o

9. I can advocate for the continual improvement of HIT to extend to broader applications of population health, community well-being, and emergent opportunities in healthcare.

	No Knowledge	Minimal Knowledge	Moderate Knowledge	Advanced Knowledge	Significant Knowledge
BEFORE (Starting LEP)	o	o	o	o	o
NOW (Completing LEP)	o	o	o	o	o

10. How confident do you feel about applying what you learned?
    - o Not Confident
    - o Slightly Confident
    - o Moderately Confident
    - o Confident
    - o Very Confident

11. To what extent do you feel the program influenced the support you received from your executive team in applying your learning?
    - o Did not influence the support I received
    - o Slightly influenced the support I received
    - o Moderately influenced the support I received
    - o Greatly influenced the support I received
    - o Extremely influenced the support I received

12. Were there noticeable changes in the support you received from your executive team during your experience in the program? _____

13. How do you intend to apply what you learned? _____

14. Do you have questions or further suggestions for us to consider to best support learning in this program? _____

SECTION 4: TRANSFORMATIVE CHANGES AND BARRIERS

Please share a short reflective story (approximately 1-2 paragraphs or 500 words) of the most significant change that may have resulted from your participation in LEP.

MOST SIGNIFICANT CHANGE STORY

1. Describe a story that best illustrates the most significant change you have experienced due to your participation in the Leadership Equity Program.
2. Why is this story significant to you?
3. Where did this change occur (select all that apply)?

   Domain #1: **Individual Leadership Capacity:** Increase awareness, Knowledge, and skills to champion anti-racism, racial equity, and well-being within CHC leadership roles and CHC operations.
   Domain #2: **Organizational Capacity:** Strengthen CHC's capacity to recruit, retain and advance diverse leaders and expand organizational policies and practices centered on anti-racism, equity, and community well-being.
   Domain #3: **Community Well-Being:** Advance place-based practices and community-based partnerships for collective action to advance health equity and community well-being.
   Domain #4: **Political and Systemic:** Influence policies and systemic changes that advance equity and improve health outcomes for communities of color.

BARRIERS TO CHANGE STORY

Please share a short reflective story (approximately 1-2 paragraphs or 500 words) of a change you wished to accomplish during LEP but were unsuccessful in achieving it.

1. Describe a story of a change you wished to accomplish during your participation in the Leadership Equity Program but were unsuccessful in achieving it.
2. Why is this story significant to you?
3. What were some of the barriers?
4. Where did the barriers occur (select all that apply)?

   Domain #1: **Individual Leadership Capacity:** Increase awareness, Knowledge, and skills to champion anti-racism, racial equity, and well-being within CHC leadership roles and CHC operations.
   Domain #2: **Organizational Capacity:** Strengthen CHC's capacity to recruit, retain and advance diverse leaders and expand organizational policies and practices centered on anti-racism, equity, and community well-being.
   Domain #3: **Community Well-Being:** Advance place-based practices and community-based partnerships for collective action to advance health equity and community well-being.
   Domain #4: **Political and Systemic:** Influence policies and systemic changes that advance equity and improve health outcomes for communities of color.

THANK YOU

This is the end of the questionnaire. Thank you for your valuable feedback and time in completing this questionnaire.

15. Do you have questions or suggestions to provide better clarity for any information included in this questionnaire?

16. Please click below if you would like to be considered for further follow-up.

OPTIONAL FOLLOW-UP

1. It is optional for you to provide your contact information to be further contacted. Would you like to be contacted further for follow-up questions?

   - o No, I do not wish to share my name and contact details at this time.
   - o Yes, I wish to share my name and contact details in the following questions.

2. *Survey Logic these questions will appear if the participant selects Yes.*

   Your information will continue to be kept confidential, and we will only share your name if granted permission. Please complete the following questions regarding your contact information and permission to use your information.:

   - o Please provide your name
     _____

   - o Please provide your email.
     _____

   Would you like to be contacted to participate in a follow-up focus group?

   - o Yes ___ No ___

   Would you like us to share your name and story about the most significant change you experienced in the program with external partners? All additional information will be kept confidential and will not be connected to your story.

   - o Yes ___ share my name and story.

   - o Yes ___ share my story but not my name.

   - o No ___ do not share my name or story.

Appendix B: Instructions for Coding

Guide for Coding

PROMPT: MOST SIGNIFICANT CHANGE STORY

The coding process will involve two cycles:

1. Cycle 1: We will first independently code the 10 participant responses using exploratory, holistic coding.
2. Read through each participant's response for prompt 1 and add one code for each response that best describes the change noted by the participant.
3. As you are coding, refer to the prompts and research questions.
4. After completing holistic coding for the 10 responses, we will come together to discuss the themes and codes to create the initial code book.
5. Cycle 2: We will then go back for a second cycle and independently code line-by-line (meaning each sentence that ends with a period) to identify additional codes and themes.
6. For cycle 2, use descriptive coding to assign labels to data to summarize in a word or short phrase the basic topic of each line of data. This can include descriptors about the facilitators to change and feelings experienced by the participants.
7. After completing line-line descriptive coding for the 10 responses, we will come together, and the codebook will be finalized.

PROMPT 2: BARRIERS TO CHANGE STORY

We will repeat a similar process for prompt 2 as described above for prompt 1.

1. Cycle 1: We will first independently code the 10 participant responses using exploratory, holistic coding.
2. Read through each participant's response for prompt 2 and add one code for each response that best describes the barrier to change noted by the participant.
3. As you are coding, refer to the prompts and research questions.
4. After completing holistic coding for the 10 responses, we will come together to discuss the themes and codes to create the initial code book.
5. Cycle 2: We will then go back for a second cycle and independently code line-by-line (meaning each sentence that ends with a period) to identify additional codes and themes.
6. For cycle 2, use descriptive coding to assign labels to data to summarize in a word or short phrase the basic topic of each line of data. This can include descriptors about the barriers to change and feelings experienced by the participants.
7. After completing line-line descriptive coding for the 10 responses, we will come together, and the codebook will be finalized.

Appendix C: Codebook for Quantitative Data Analysis

Table 18. Codebook for Quantitative Data Analysis

ELEMENTS	CODES	LEARNING TARGETS	AGREEMENT SCALE				
			NK	MK	OK	AK	SK
			1	2	3	4	5
ANTI-RACISM & RACIAL EQUITY (AR)	AR1	I can explain the correlation between racial trauma and the resulting health outcomes.					
	AR2	I can explain the tenants of Isabel Wilkerson's theory of the American caste system – a new framework to understand systemic racism.					
	AR3	I can explain the correlation between provider implicit bias and the lower-quality health services.					
	AR4	I can describe the health implications of black iatrophobia in the US.					
	AR5	I can explain key concepts of intersectionality between race, gender, class, and other areas of social identity.					
	AR6	I can formulate critical questions with teams I manage that connect antiracism with promoting health equity.					
	AR7	I can formulate antiracist policies and practices that mitigate racial health disparities for targeted health outcomes.					
LEADERSHIP DEVELOPMENT (LD)	LD1	I can describe how limiting beliefs hinder leadership effectiveness and impact.					
	LD2	I can describe key strengths that drive career success					
	LD3	I can use shared language to create allies					
	LD4	I can explain concepts of inclusive leadership					
	LD5	I can identify ways that unconscious bias manifests in the workplace.					
	LD6	I can use core tenets of change management to navigate change skillfully.					

	LD7	I can describe ways to mobilize various levels of the CHC organization to advocate for policies and practices centered on justice, equity, diversity, and inclusion (JEDI).					
	LD8	I can develop practices that build relationships and coalitions with stakeholders that foster racial and health equity.					
COMMUNITY WELL-BEING (CW)	CW1	I understand that community conditions, at the local, state, and federal levels, are determinants of health and impact under-resourced communities.					
	CW2	I can identify concrete opportunities to address racism, discrimination, and other forms of oppression my health center.					
	CW3	I can form strategic partnerships with community groups to advance health equity.					
	CW4	I can use storytelling and data to develop a balanced set of strategies to advance health equity.					
	CW5	I can describe how building the well-being of people, places, and systems together will build equity.					
	CW6	I can identify levers for change within my organization.					
HEALTH CENTER OPERATIONS (HCO)	HCO1	I can deconstruct HR practices that contribute to racism, discrimination and other forms of oppression in the workplace.					
	HCO2	I can leverage data to sustain progress on diversity, equity, and inclusion (DEI) throughout the organization.					
	HCO3	I can explain why healthcare payment is shifting away from fee-for-service.					
	HCO4	I can describe the role of Accountable Care Organizations in value-based care.					
	HCO5	I can identify new approaches to health center operations.					
	HCO6	I can explain the importance of HIT as it pertains to improving equity in care delivery.					

Appendix D: Codebook for Qualitative Data Analysis

Table 19. Codebook for Qualitative Data Analysis

Code	Grounded	Code Groups
○ Capstone Challenges	4	Barriers
○ Competing Priorities	5	Barriers
○ Feeling Disconnected	1	Barriers
○ Organizational Challenges	3	Barriers
○ Self-doubt	5	Barriers
○ Unfinished work	2	Barriers
○ Aligning Personal and Professional Goals	2	Changes at Individual Level
○ Awareness of Privilege and White Supremacy	2	Changes at Individual Level
○ Awareness of Racial Equity	5	Changes at Individual Level
○ Confidence in Leadership	6	Changes at Individual Level
○ Confidence in Racial Equity	3	Changes at Individual Level
○ Confidence in Self	7	Changes at Individual Level
○ Confidence to Make a Difference	3	Changes at Individual Level
○ Overcoming Self-limiting beliefs	2	Changes at Individual Level
○ Self-reflection	5	Changes at Individual Level
○ Self-renewal and Self-Care	3	Changes at Individual Level
○ Transformation	1	Changes at Individual Level
○ Advancing JEDI Changes in the Organization	3	Changes at the Organizational Level
○ Advancing Community Well-being	4	Changes at the Community Level
○ Building Community Partnership	4	Changes at the Community Level
○ Advancement to C-suite	1	Changes at the Organizational Level
○ Appreciation for lived experience	2	Program Enablers
○ Capstone Opportunities	3	Program Enablers
○ Capstone Project	7	Program Enablers
○ Encouragement and Affirmation of Ideas	2	Program Enablers
○ Tools and Strategies	3	Program Enablers