Review of LHDs Defining, Measuring, and Tracking Progress Towards Achieving Health Equity

NACCHO SM
National Association of County & City Health Officials

School of Public Health
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About CPHS

The Center for Public Health Systems (CPHS) at the University of Minnesota School of Public Health (UMN-SPH) was established in 2021 to support public health practitioners and public health systems using evidence-based research. CPHS improves the health of the people of Minnesota and the nation through technical assistance, research, and evaluation services. Its mission is to support governments, organizations, and communities using evidence-based public health practices and generate new evidence about public health systems.

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We would like to acknowledge the National Association of County and City Health Officials (NACCHO) for their partnership and support for this project. CPHS collaborated with NACCHO to create a toolkit to increase local health departments' (LHD) ability to perform health equity performance measurement (HEPM) work. To create this toolkit CPHS conducted an environmental scan to identify how LHDs are defining, measuring, and tracking progress toward achieving health equity as part of their performance management.

Introduction

Performance measures are indicators that are used to create performance standards, which can be used to track and assess performance as a part of performance management or quality improvement processes. Performance measures can be applied to health equity-related activities, outputs, and outcomes. Depending on your goals, performance measures can be designed to assess progress at all stages of a program, project, or initiative, such as short-term, mid-term, and long-term outcomes. Performance measures can also be a tool to support tracking capacity and processes.

Based on an environmental scan of peer-reviewed literature and plans written by public health departments with goals or strategies to advance health equity, this report captures local health departments' (LHDs) current processes of defining, measuring, and tracking progress toward health equity as part of their performance evaluation. In the report, we discuss the different types of performance measures, including (1) output performance measures, or the immediate, tangible outputs from a given activity or number of activities; and (2) outcome performance measures, which capture the impacts of interventions, and which can range from short-term to long-term. The report discusses how LHDs track progress towards achieving health equity in three domains: 1) access to the continuum of healthcare, 2) access to food and food security, and 3) protecting communities from climate change's public health impacts.

Methods

To identify performance measures for LHDs, we first found at least one plan – including Community Health Assessments (CHAs), Community Health Improvement Plans (CHIPs), Health Equity Plans, and Strategic Plans – that included goals or strategies to advance health equity from every state and Washington, DC using Google Search. LHDs include health departments at county government, combined town governments, and city government levels. We then excluded states or federal districts where we only found plans written by state health agencies or healthcare systems because we are interested in how LHDs themselves define and measure their progress towards achieving health equity. Our sample included 54 plans across 39 states (see **Appendix A**). We also conducted a literature review of peer-reviewed journal articles and gray literature (non–peer-reviewed sources such as dissertations, journal commentaries, and research reports) on Google Scholar. For HEPM please add (see Appendix B for search terms).

Findings and Recommendations

HEALTH EQUITY DEFINITION

The working definition of "health equity" that characterized most LHD planning documents and the peer-reviewed literature included in our environmental scan used some iteration of the Centers for Disease Control and Prevention (CDC)'s definition of HE which includes any identifiable effort or action whose purpose was to advance a "fair and just opportunity to attain their highest level of health.'"[1] This included key phrases such as ""attainment," "striving for," "highest level of health," "full health potential," "optimal health," "fair and just opportunity," "absence of disparities," and "elimination of disparities in health."

Importance of Health Equity to Public Health

Recognized by the Public Health Accreditation Board (PHAB), the accreditation body for public health agencies, health equity is one of the foundational public health services.[2] Health equity, particularly addressing racial health disparities—has become increasingly central to public health efforts, notably at the local level. Thirty-seven of the LHD plans that were included in our sample were from PHAB accredited LHDs. All of these plans included health disparity measures, and many framed programming performance measures to ensure historically marginalized communities were included and/or targeted for intervention. However, other research studies have found that this practice is not common; one examination of Illinois-based CHIPs noted that only 13% of CHIPs explicitly addressed social determinants via interventions.[3]

Existing Frameworks that Inform Health Equity Agendas

Many of the most common frameworks and tools used by health agencies to conduct their CHAs and CHIPs incorporated health equity concepts. LHDs relied on existing toolkits and frameworks to identify health-related disparities within their communities and define how best to improve their constituents' health statuses. Commonly used frameworks included:

- NACCHO's Mobilizing for Action through Planning and Partnership (MAPP) was a common tool used by LHDs in our sample as part of the CHA and CHIP development process.[4] Existing research has confirmed the ubiquity of MAPP as a guiding framework.[3]
- CHAs frequently used available data from County Health Rankings & Roadmaps which disseminates county-level estimates for a range of different health measures, including many non-health determinants.[5]
- Healthy People 2020/20306 provided a common set of equity-related long-term goals for LHDs to pursue as part of their planning process.
- LHDs also adopted other tools as well, such as the Community Health Assessment Toolkit from the Association for Community Health Improvement 7 and the Community Tool Box 8 from the University of Kansas, although none were as commonly used as MAPP.

Health Equity and Agency Accreditation

As described above, agency accreditation has provided further impetus for agencies to incorporate health equity concepts into their work. LHDs frequently noted their accreditation status and cited the standards delineated by the accrediting agency, PHAB. These standards have long emphasized health equity and require extensive documentation for agencies to demonstrate that their efforts to improve health equity are sufficient to maintain accreditation.[9] Other research has confirmed that PHAB-accredited LHDs are more likely to address health disparities in their CHIPs relative to non-accredited LHDs.[10] PHAB accreditation was more common among diverse, urban-serving LHDs in both our sample and confirmed with national analysis, suggesting a need to determine how best to encourage accreditation among more rural-serving LHDs as a strategy for advancing health equity nationwide.[11]

Importance of Community Collaboration and Collective Action

Community partnerships with other area organizations to advance health equity – especially local hospitals and community nonprofits – were frequently cited throughout the sampled planning documents. Intuitively, this makes sense; LHDs are not always front-line providers of social services, for example, and would need to partner with other agencies to expand the reach and scope of these types of interventions. Many of the aforementioned frameworks such as MAPP also require collaboration with different stakeholder groups to ensure sufficient input and buy-in for assessment and planning purposes.

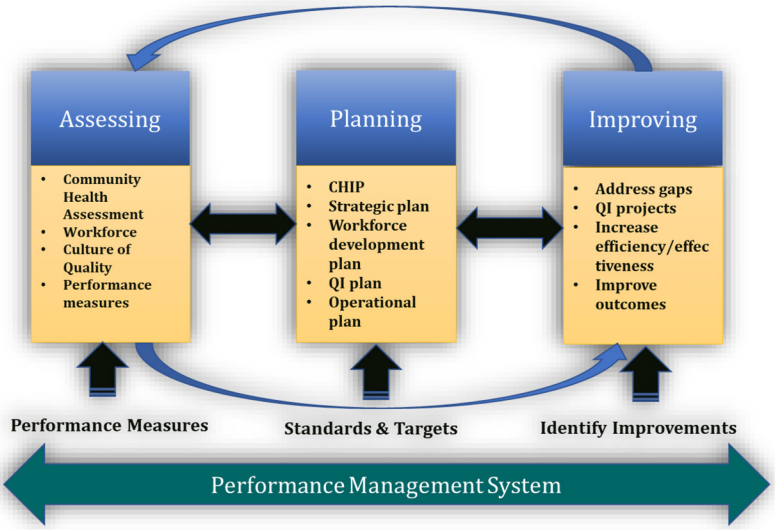
Health Equity and Access to Healthcare Services

Health agency programming delineated in CHIPs frequently addressed access to social determinants of health, but by far, the most common interventions were framed around access to healthcare. While our sample of planning documents incorporated important health equity aspects and addressed key upstream social determinants, we also noted that all planning documents included at least one or more activities meant to improve access to healthcare services. Ensuring their constituents have access to needed healthcare services continues to be a critical public health approach to addressing health equity.

PERFORMANCE MEASURES

Performance measures are indicators that are used to create performance standards, which can be used to track and assess performance as a part of performance management or quality improvement processes. Performance measures can be applied to health equity-related activities, outputs, and outcomes. Depending on your goals, performance measures can be designed to assess progress at all stages of a program, project, or initiative, such as short-term, mid-term, and long-term outcomes. Performance measures can also be a tool to support tracking capacity and processes. NACCHO's 2018 *Measuring What Matters in Public Health* guide outlines a key distinction between performance management and performance measurement (see image below from NACCHO's guide)[12].

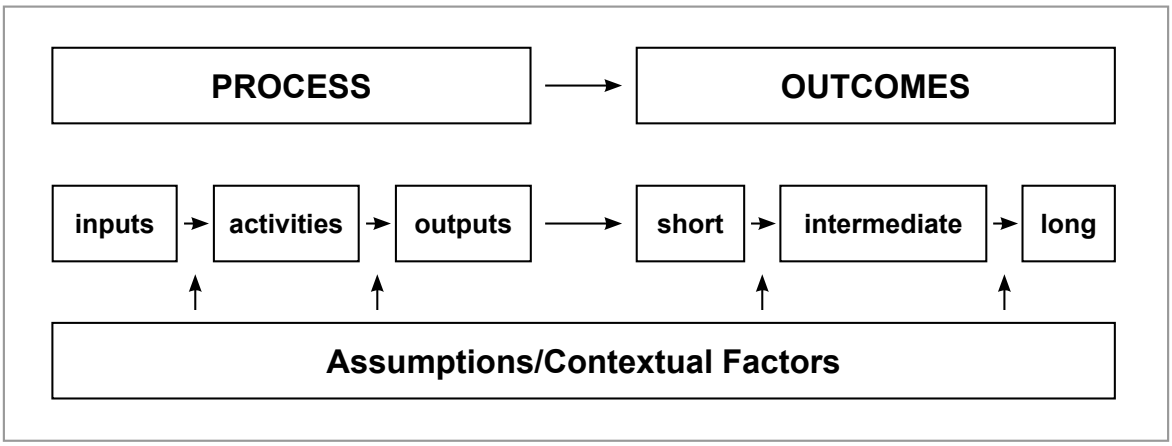
- Performance management is the practice of actively using performance data to improve the public's health through the strategic use of performance standards and measures, progress reports, and ongoing quality improvement.
- Performance measurement is the use of quantitative metrics and indicators to collect data and track progress against strategy, goals, and objectives.
- Performance improvement is the positive change in public health capacity, processes, or outcomes using clear and aligned planning, monitoring, and improvement activities.



Source: National Association of County & City Health Officials. Measuring What Matters in Public Health: A Health Department's Guide to Performance Management.; 2018.

Types of Performance Measures

Performance measures can be used to capture the impact of activities at different time points. In this environmental scan, we used the CDC's Evaluation Guide: Developing and Using a Logic Model,[13] which distinguishes between the process associated with implementing public health programming, and outcomes that will occur due to the programs being implemented (see image below). Process-oriented performance measures assess how well implemented a program is and reflect the immediate, tangible outputs from a given activity or number of activities.[28] Outcome performance measures largely focus on (1) immediate changes in the targeted population's knowledge or skills (i.e., short-term outcomes); (2) changes that might take slightly longer to materialize, such as changes in healthful behavior, changes in the normative status of targeted people or organizations, or changes in policy; and (3) longer-term changes that can take years to accomplish, such as changes in population health status.[13]



Source: Logic model (page 2 of the CDC Evaluation Guide).

A logic model is one way to illustrate how LHDs intend to implement a program and how its success can translate into various outputs and outcomes over time, ultimately leading to a positive impact. Logic models are important for identifying initial performance measures. SMART objectives for performance measures are commonly used to reduce health disparities. The acronym SMART stands for **S**=Specific, **M**=Measurable, **A**=Achievable, **R**=Relevant, and **T**=Time bound. LHDs use SMART objectives when creating logic models to identify the goals, outcomes, objectives, strategies, and performance indicators. The process for creating these measurable outcomes is: 1) identifying what to change, 2) understanding basic details like the intended direction of change and units, and 3) adding details to finalize a SMART metric by which LHD can hold itself accountable.

Only three plans in our sample—Pima County CHIP (AZ), Maricopa County CHIP (AZ), and Kaua'i County CHIP (HI)—used logic models to inform their performance measures. Two of these plans (Pima County and Maricopa County) briefly mentioned that their CHIP used logic models and used SMART objectives. Pima County's CHIP developed logic models for each of their health priorities.[14] Maricopa County's CHIP created a four-point logic model diagram that asks questions about problems or needs, the causes of the problems, how will the causes be addressed, and what specific things could be accomplished to improve the problem.[15] Conversely, Kaua'i County's CHIP describes the training in logic models that their members received to build community capacity and facilitate the development of their CHIP. They also discussed the 12 logic models that they created (one for each of their strategic actions that they prioritized) in great detail.[16]

Notably, not all types of performance measures in the plans we sampled included specific numeric benchmarks; many measures were vague and unspecified. However, greater specificity in performance measures does make it easier and more precise to track and determine how well an LHD did in meeting their goals. These performance measure types (activities and outcomes) are discussed within three different health domains:

- Access to the continuum of healthcare
- Access to healthy foods and food security
- Climate change and public health

ACCESS TO THE CONTINUUM OF HEALTHCARE

Our environmental scan confirmed that the most common categories of performance measures were centered on improving access to the continuum of healthcare services or ensuring that patients received timely, appropriate treatments from qualified health providers. All 54 plans across 39 states included access to healthcare or quality of care. Most of these plans included specified numeric outcomes and/or activities related to access to healthcare specified numeric outcomes or activities related to access to healthcare (see Figure 1 to the right for examples).

LHD EXAMPLE

- "Reduce the current disparity in life expectancy between the white and Black populations by 5%."[17]
- "Increase the percent of patients […] with hypertension whose blood pressure is controlled (less than 140/90) from 60–65% to 70%."[18]
- "Decrease youth pregnancy rates by 10% among populations most affected by health disparities."[19]
- "Increase number enrolled in health care insurance coverage to 90%."[20]

Figure 1. LHD Examples of Measurable Access to the Continuum of Healthcare Outcomes.

LHD EXAMPLE

- "Reduce the percentage of Jefferson County residents experiencing food insecurity from 18.3% to 17.4% by November 2019"[17]
- "25% of Kaua'i adults eat five or more fruits and vegetables a day, up from 16% now, as measured by Hawai'i Health Matters."[16]
- "Stop the increase in adult obesity and decrease obesity among public school children aged 5–18 from 20.6% in 2014–2015 to 18.5% in 2019–2020."[18]
- "By 2020, the percentage of Burlington County who consume fast-food on a daily or semi-daily basis will decrease by 5%."[22]

Figure 2. LHD Examples of Measurable Access to Healthy Foods Outcomes.

ACCESS TO HEALTHY FOODS AND FOOD SECURITY

Access to healthy foods and food security was the second most common category (n=51) of performance measures that we found in all plans except 3—Wyandotte County (KS), Harford County (MD), and Oneida County (WI). The majority of LHDs' plans indicated that socioeconomic factors, like access to healthy foods and food security, have greater influence over an individual's health outcomes and life expectancy than accessing healthcare (see Figure 2 to the left for examples). Rates of obesity are higher among those with low socioeconomic status, which may result from challenges in accessing grocery stores, fresh produce and healthy food options, and an abundance of nutrient-deficient but high-caloric foods.[17] The history of racial segregation, placement of highways, and economic disinvestments – which is still present in many current policies and practices – have contributed to formerly thriving Black and Hispanic/Latine neighborhoods becoming food deserts.[21]

CLIMATE CHANGE AND PUBLIC HEALTH

Climate change was the least common category of performance measure that we observed in the plans in our sample. Only 13 plans across 8 states included climate change type of measures. While fewer LHDs addressed climate change than the other two health domains, protecting communities from climate change profoundly impacts all social determinants of health from economic well-being to the usage of healthcare (see Figure 3 to the right for examples). This issue is also particularly relevant to advancing health equity, as not everyone has the financial means to weather its impacts or disasters. For instance, warming temperatures will increase pollutants in the air we all breathe, but many Black and Hispanic/Latine communities are disproportionately impacted by air pollution due to living in neighborhoods with less tree cover and green spaces because of legacies of discriminatory policies and practices.[23]

LHD EXAMPLE

- By 2020, decrease the percent of children ages 0–17 years with current asthma who go to the ER or urgent care due to asthma from 35% to 18%."[24]
- "[Reducing] levels of ozone to 80 parts per billion for 2020 and reducing annual fine particle pollution levels to 10 micrograms per cubic meter of air for 2018–2020."[18]

Figure 3. LHD Examples of Measurable Climate Change and Public Health Outcomes.

Resources for Constructing Performance Measures

CHAs and other similar assessments that use available data to present a holistic profile of a community's health, including what health issues are the most pressing, are essential input into any subsequent planning process. CHAs are critical for LHDs to plan where to allocate their effort to best affect their community's health. Almost all LHDs will periodically conduct a CHA, often in collaboration with other organizations and agencies.[25] For LHDs that pursue PHAB accreditation, CHAs (and subsequent CHIPs) must be conducted within five years.[26] Many performance measures for LHDs to pursue were constructed based on the results of CHAs. As a fundamental public health service, CHAs provided the basis upon which key health equity concepts were subsequently built into LHDs planning efforts. As noted, many of the tools or frameworks that LHDs use to conduct their CHAs such as MAPP rely on health equity concepts to identify where health disparities might exist.

LHDs construct their performance measures on existing publicly available secondary data sources, such as the Behavioral Risk Factor Surveillance System (BRFSS), and this was reflected in the CHAs that we reviewed.[27] Using these data sources ensures LHDs can better track population health changes over time with minimal effort. Another frequently used tool was the County Health Rankings & Roadmaps from the University of Wisconsin Population Health Institute, which aggregates available data sources, including BRFSS, into a county-based health profile for almost all counties in all 50 states to "build awareness of the multiple factors that influence health and support leaders in growing community power to improve health equity."[5]

Examples of community health indicators used to identify health issues and/or track progress made toward improving health equity (from the County Health Rankings & Roadmaps)[5]:

Access to the continuum of healthcare services

- Percentage of the population under age 65 without health insurance
- Ratio of population to primary care physicians/dentists/mental health providers
- Rate of hospital stays for ambulatory-care sensitive conditions per 100,000 Medicare enrollees

Access to healthy foods and food security

- Percentage of the adult population (age 18 and older) that reports a body mass index (BMI) greater than or equal to 30 kg/m2 (age-adjusted)
- Percentage of the population who are low-income and do not live close to a grocery store
- Percentage of the population who lack adequate access to food

Climate change and public health

- Average daily density of fine particulate matter in micrograms per cubic meter (PM2.5)
- Percentage of the workforce who drive alone to work
- Among workers who commute in their car alone, the percentage who commute more than 30 minutes.

Tracking Progress Towards Health Equity

It was difficult to consistently find progress reports online in which LHDs evaluated their success in carrying out activities and meeting performance measures identified in their CHIPs. That said, LHDs may have internal progress reports that are not publicly unavailable. Of the four progress reports we could find, they fit the following patterns:

- **LHDs could not determine if they had made progress based on performance measures.** This happened when plans set performance measures for population health outcomes, such as reducing the mortality rate of Black infants, that might take longer than one or four years to see happen in public health surveillance. These reports typically come out on a quarterly or annual basis.
- **LHDs reported performance metrics that did not align with their HE goals.** For example, an LHD set a performance measure for reducing the percentage of residents who were uninsured. However, they reported on how many applications they assisted residents in filling out for Medicaid and other programs (e.g., Supplemental Nutrition Assistance Program) that were not related to health insurance. This made it hard to see how many Medicaid applications went towards increasing insured individuals and families.
- **LHDs reported on their progress in meeting performance measures but did not meet their goals.** Douglas County, Nebraska reported on their current status in meeting outputs, including decreasing the percentage of those reporting difficulty in accessing healthcare in the past year.[33] While they did achieve a 2% decrease in residents reporting difficulty in accessing child's healthcare in the past year, this was below their 5% goal. It is worth noting that the report lacked details on what activities LHDs carried out to achieve these outputs, or whether there were other events happening in the area that were causing these changes.

- **LHDs chose not to set performance measures but used other metrics to describe what they achieved.** Columbus, Ohio set non-numeric performance measures, including aiming to increase the affordability of healthy foods.[34] Their progress report included the amount of funding they gave to community gardens and to a program to increase access to produce for those facing food insecurity and chronic health problems.

Many LHDs also identified new systems of collecting data and tracking progress as new activities to complete, since writing public plans created opportunities for them to reflect and plan next steps. Collecting accurate data is vital to assessing current activities and creating future performance measures. For instance, Nashville, Tennessee pursued funding for a Behavioral Health System Assessment to better track if those who are uninsured or underinsured can access care.[35]

Conclusion

Overall, LHDs regard health equity as a critical component of public health functions. Health equity concepts were included in all LHD CHAs we reviewed. While this may be due to the high number of PHAB-accredited LHDs in our sample, it also reflects the long-standing commitment from national public health leaders to ensure public health practitioners have the tools necessary to identify and address health disparities. When identifying and defining the best ways to reduce health-related disparities, LHDs relied on frameworks such as NACCHOS's MAPP, CHAs, and Healthy People 2020/2030.Only three plans in our sample—Pima County CHIP (AZ) Maricopa County CHIP (AZ), Kaua'i CHIP (HI), Clinton County CHIP (NY), and Williamson County CHIP (TX)—used logic models to identify necessary outputs and outcomes to address health disparities. This review is not fully representative of all LHDs and is not comprehensive of all measures of social determinants of health found in CHA/CHIPs.

In this report, we categorized health equity performance measures as outputs and outcomes. Output are measures that track of the number of HE activities, products, or services one carried out, while outputs are changes in the targeted population's knowledge or skills, healthful behavior, changes in policy, or longer-term changes such as changes in population health status. We noted how performance measures of each type were constructed across three example health domains: access to a continuum of healthcare, access to healthy foods and food security, and climate change and public health. Within our sample, access to healthcare was the most common health domain (n=54) that LHDs chose to address via their performance measures where they engaged in programming meant to reach those with low access to healthcare, such as increasing home visits, telemedicine, and health literacy education to their community. Of the plans that addressed access to healthy foods and food security (n=51), many noted the impact of low socioeconomic status and race/ethnicity, on inequitable access to healthy foods and focused on providing food assistance or working to change local policy and environments that lead to food deserts. Lastly, while smaller in number (n=13), LHDs' plans that focused on the disproportionate impact of climate change noted the role that public health has in protecting these communities and they engaged in activities such as improving air quality for members of their community and engaging in outcomes like providing access to green spaces.

KEY TAKEAWAYS

- Health equity is regarded as a critical component of public health functions.
- Frameworks such as NACCHOS's MAPP, CHAs, and Healthy People 2020/2030 are the most common types of tools that LHDs use.
- The act of setting numeric and tangible performance measures makes it easier for LHDs to track their progress in incorporating health equity.
- Many performance measures, particularly outcomes, lacked specificity that enables better accounting of LHDs' progress from the communities that they serve.
- Some LHDs lacked sufficient evidence for how certain interventions addressed health disparities, i.e., programming that seemed targeted to the community at large but was characterized as advancing health equity.

NEXT STEPS

This environmental scan has provided a brief overview of how LHDs have constructed their health equity-related performance measures across the country. Importantly, there were areas that we could not cover in more depth in this scan. For example, we only found one CHIP from Whatcom County, WA where community participation was mentioned. They noted that those who experienced racism were part of the group that identified strategies. While we cannot rule out that community engagement did not occur in other plans, finding information on this part of the process was harder to uncover by just reading publicly available plans.

Building truly equitable performance measures cannot occur without impacted communities' continued involvement and trust in the process. The involvement of impacted communities can create performance measures and activities that more closely reflect what can work on the ground and generate buy-in with communities and external stakeholders that carry them out with LHDs. These critical components will also be discussed as part of UMN's health equity toolkit for LHDs to use when developing performance measures that address health equity in their communities. *The Health Equity Performance Measures Toolkit: A Guide for Local Health Departments*, which was informed by this environmental scan and conversations with LHD staff working behind the scenes and uncover the extent they are involved in impacted communities, is a resource for LHDs in creating best practices for performance measures that advance health equity and truly reflect communities' needs.

Appendix A

ST	#of plans reviewed in state	Name of health department	Population size category	Urban or Rural	PHAB ACRED (yes/no)	Name of plan	1st Type of PM	2nd Type of PM	3rd Type of PM	Use logic models (yes/no)	Link to plan
AK	0						continuum of access to healthcare	access to healthy food			
AL	1	Jefferson County Department of Health	500k-999k	Urban	No	Community Health Improvement Plan for Jefferson County, Alabama 2014				No	https://www.nationalcollaborative.org/wp-content/uploads/2016/02/Community-Health-Improvement-Plan-for-Jefferson-County-Alabama-November-2014.pdf
AR	0										
AZ	2	Pima County Health Department	1MM+	Urban	Yes	Pima County Community Health Improvement Plan 2013-2017	continuum of access to healthcare	access to healthy food		Yes	https://prism.lib.asu.edu/system/files/c16/115321/Community_Health_Improvement_Plan_2013-2017.pdf
		Maricopa County Department of Public Health	1MM+	Urban	Yes	Maricopa County Community Health Improvement Plan (2018-2023)	continuum of access to healthcare	access to healthy food		Yes	https://www.maricopa.gov/DocumentCenter/View/51819/CHIP-Cycle-2-Report
CA	3	Los Angeles County Department of Health Services	1MM+	Urban	Yes	Community Health Improvement Plan for Los Angeles County 2015-2020	continuum of access to healthcare	access to healthy food	climate change	No	http://publichealth.lacounty.gov/plan/docs/CHIPforLACounty20152020.pdf
		County of San Diego HHS and Public Health Services	1MM+	Urban	Yes	2015 Health Equity Plan: County of San Diego	continuum of access to healthcare	access to healthy food	climate change	No	https://www.sandiegocounty.gov/content/dam/sdc/hhsa/programs/phs/documents/equity-plan.pdf
		Santa Clara County Public Health Department	1MM+	Urban	Yes	County of Santa Clara Public Health Department Strategic Plan 2019-2022	continuum of access to healthcare	access to healthy food	climate change	No	https://publichealth.sccgov.org/sites/g/files/exjcpb916/files/sccphd-strategic-plan-2019-2022.pdf
CO	1	Jefferson County Public Health	500k-999k	Urban	Yes	2019-2021 Jefferson County Community Health Improvement Plan	continuum of access to healthcare	access to healthy food	climate change	No	https://www.jeffco.us/DocumentCenter/View/16041/2019-2021-Community-Health-Improvement-Plan?bidId=
CT	2	Wallingford Health Department	25k-49k	Urban	No	Wallingford Community Health Alliance Improvement Plan 2019	continuum of access to healthcare	access to healthy food		No	https://www.wallingfordct.gov/customer-content/www/CMS/files/HealthCHAImprovPlan2019.pdf
		Norwalk Health Department	50k-99k	Urban	Yes	2019 Greater Norwalk Region Community Health Needs Assessment and Community Health Improvement Plan	continuum of access to healthcare	access to healthy food		No	https://www.norwalkct.gov/DocumentCenter/View/25068/2019-Greater-Norwalk-Community-Health-Assessment-and-Improvement-Plan

ST	#of plans reviewed in state	Name of health department	Population size category	Urban or Rural	PHAB ACRED (yes/no)	Name of plan	1st Type of PM	2nd Type of PM	3rd Type of PM	Use logic models (yes/no)	Link to plan
DE	0										
FL	2	Gadsden County Health Department	25k-49k	Urban	Yes	DOH-Gadsden Health Equity Plan July 2022-June 2025	continuum of access to healthcare	access to healthy food		No	https://www.floridahealth.gov/programs-and-services/minority-health/_documents/health-equity-plans/GadsdenCountyHealthEquityPlan.pdf
		Manatee County Health Department	250k-499k	Urban	Yes	Manatee County 2022-2026 Health Equity Plan	continuum of access to healthcare	access to healthy food		No	https://www.floridahealth.gov/programs-and-services/minority-health/_documents/health-equity-plans/ManateeCountyHealthEquityPlan.pdf
GA	0										
HI	1	Kaua'i District Health Office	50k-99k	Urban	No	Kaua'i Community Health Improvement Plan 2014	continuum of access to healthcare	access to healthy food		Yes	https://www.hawaiipacifichealth.org/media/2920/kauai-health-improvement-plan-2014.pdf
ID	1	Panhandle Health District	100k-249k	Urban	Yes	North Idaho Community Health Improvement Plan Panhandle Health District 2018	continuum of access to healthcare	access to healthy food		No	https://panhandlehealthdistrict.org/wp-content/uploads/2019/06/CHIP-Final.pdf
IL	1	Cook County Department of Public Health	1MM+	Urban	Yes	Community Health Assessment & Community Health Improvement Plan for Suburban Cook County, Illinois 2025	continuum of access to healthcare	access to healthy food	climate change	No	https://cookcountyhealth.org/wp-content/uploads/CCH_2022_Strategic_Plan-082922.pdf
IN	1	Boone County Health Department	50k-99k	Urban	No	2018-2020 Boone County Community Health Improvement Plan (CHIP)	continuum of access to healthcare	access to healthy food		No	https://drive.google.com/file/d/1NPNyWF5YVw_iHBrReqQL4SQLOmMMfupu/view
IA	1	Linn County Public Health	100k-249k	Urban	Yes	Linn County Community Health Improvement Plan 2019-2021	continuum of access to healthcare	access to healthy food		No	https://www.linncountyiowa.gov/DocumentCenter/View/10460/2019-2021-Community-Health-Improvement-Plan-PDF?bidId=#
KS	1	Wyandotte County	100k-249k	Urban	No	2018-2023 Wyandotte County Community Health Improvement Plan Year 3 Annual Report January-December 2021	continuum of access to healthcare			No	https://www.wycokck.org/files/assets/public/v/1/health/documents/chip-year-2-annual-report.pdf
KY	1	Madison County Health Department	50k-99k	Rural	Yes	Madison County Health Department Community Health Assessment and Improvement Plan June 2021	continuum of access to healthcare	access to healthy food	climate change	No	https://madisoncountyhealthdept.org/Documents/Community/CHIP2021.pdf

State	#of plans reviewed in state	Name of health department	Population size category	Urban or Rural	PHAB ACRED (yes/no)	Name of plan	1st Type of PM	2nd Type of PM	3rd Type of PM	Use logic models (yes/no)	Link to plan
LA	1	City of New Orleans Department of Health	250k-499k	Urban	Yes	New Orleans Community Health Improvement Plan 2022-2025	continuum of access to healthcare	access to healthy food	climate change	No	https://nola.gov/getattachment/Health/Community-Health-Improvement/Reports/NOHD_New-Orleans-CHIP-2022-2025_FINAL.pdf/?lang=en-US
ME	1	City of Portland Public Health Division	50k-99k	Urban	Yes	Portland Community Health Improvement Plan 2022-2025	continuum of access to healthcare	access to healthy food		No	https://content.civicplus.com/api/assets/5217c072-5595-4069-9f37-2e602affe700#
MD	2	Harford County Health Department	250k-499k	Urban	Yes	Harford County Community Health Improvement Plan January 2019 - 2024	continuum of access to healthcare			No	https://harfordcountyhealth.com/wp-content/uploads/2020/01/Harford-County-2019-CHIP.pdf
		Montgomery County Department of Health and Human Services	1MM+	Urban	Yes	2017-2019 Community Health Improvement Plan: Healthy Montgomery	continuum of access to healthcare	access to healthy food		No	https://www.montgomerycountymd.gov/healthymontgomery/Resources/Files/Reports/Healthy_Montgomery_CHIP_2017-2019%20.pdf
MA	1	Boston Public Health Commission	500k-999k	Urban	Yes	2020 Community Health Improvement Plan Boston CHNA-CHIP Collaborative	continuum of access to healthcare	access to healthy food	climate change	No	https://www.bostonchna.org/wp-content/uploads/2020/12/Boston-CHIP-FINAL-3.5.20.pdf
MI	1	Macomb County Health Department	500k-999k	Urban	Yes	2017 Macomb County Community Health Improvement Plan	continuum of access to healthcare	access to healthy food		No	https://www.macombgov.org/sites/default/files/files/2022-09/chip-summary-report-2017-2020.pdf
MN	3	St. Paul-Ramsey County Public Health	500k-999k	Urban	Yes	Community Health Improvement Plan (CHIP) 2019 – 2023	continuum of access to healthcare	access to healthy food	climate change	No	https://www.ramseycounty.us/sites/default/files/Departments/Public%20Health/CHIP%202019-2023%20%2022_0927.pdf
		Rice County Human Services-Public Health	50k-99k	Rural	No	"2020-2024 Rice County Community Health Improvement Plan"	continuum of access to healthcare	access to healthy food		No	https://www.ricecountymn.gov/DocumentCenter/View/696/2020-24-Community-Health-Improvement-Plan
		St. Louis County Public Health and Human Services	100k-249k	Urban	No	"Working Together for a Healthy Duluth: 2020–2022 Community Health Needs Assessment"	continuum of access to healthcare	access to healthy food		No	https://www.essentiahealth.org/app/files/public/e40ecfeb-23b6-4a37-a436-f6fe8e5625e4/duluth-chna-2020-2022.pdf
MO	1	St. Louis County Department of Public Health	500k-999k	Urban	Yes	2023-2027 St. Louis Regional Community Health Improvement Plan	continuum of access to healthcare	access to healthy food		No	https://www.thinkhealthstl.org/content/sites/stlouisco/Test_CHIP_report_2023.pdf
MS	0										
MT	1	Lewis and Clark City-County Health Department	50k-99k	Rural	Yes	Lewis and Clark County Community Health Improvement Plan 2022	continuum of access to healthcare	access to healthy food		No	https://www.lccountymt.gov/files/assets/county/v/1/health/documents/chip_2022_finalrevwithdate.pdf

State	#of plans reviewed in state	Name of health department	Population size category	Urban or Rural	PHAB ACRED (yes/no)	Name of plan	1st Type of PM	2nd Type of PM	3rd Type of PM	Use logic models (yes/no)	Link to plan
NC	1	Alamance County Health Department	100k-249k	Urban	No	Alamance County Community Health Improvement Plan (CHIP) 2018	continuum of access to healthcare	access to healthy food		No	https://eloncdn.blob.core.windows.net/eu3/sites/519/2020/11/Alamance-County-Community-Health-Improvement-Process-2019-1-1.pdf
ND	0										
NE	1	Douglas County Health Department	500k-999k	Urban	No	The 2015 Community Health Improvement Plan (CHIP): Action and Impact Report	continuum of access to healthcare	access to healthy food		No	https://www.douglascountyhealth.com/images/CHNS/CHIP/2015_CHIP_Report_Action_and_Impact.pdf
NH	1	Nashua Division of Public Health and Community Services	50k-99k	Rural	Yes	2022 Greater Nashua Community Health Improvement Plan	continuum of access to healthcare	access to healthy food		No	https://dashboards.mysidewalk.com/gnphr-cha/2022-community-health-improvement-plan
NJ	2	Mercer County Division of Public Health	250k-499k	Urban	No	Greater Mercer Public Health Partnership 2021 Community Health Improvement Plan	continuum of access to healthcare	access to healthy food		No	https://healthymercer.org/wp-content/uploads/2022/06/PDF-CHIP-FINAL-2021-12-30.pdf
		Burlington County Health Department	250k-499k	Urban	No	Burlington County: Community Health Improvement Plan CHIP 2014	continuum of access to healthcare	access to healthy food		No	https://demanddeborah.org/app/uploads/sites/2/2020/07/Burlington-County-CHIP-2014.pdf
NM	0										
NV	0										
NY	1	Clinton County Department of Public Health	50k-99k	Rural	Yes	Clinton County Community Health Improvement Plan & UVHN-CVPH Community Services Plan: 2019 End-of-Year Update	continuum of access to healthcare	access to healthy food		No	http://www.clintonhealth.org/pdf%20files/CHIP.pdf
OH	2	Cuyahoga County Board of Health	500k-999k	Urban	Yes	Cuyahoga County Community Health Improvement Plan 2015	continuum of access to healthcare	access to healthy food		No	https://hipcuyahoga.org/wp-content/uploads/2016/02/HIPC_CHIP_Web-1.pdf
		Columbus Public Health	500k-999k	Urban	Yes	Greater Columbus Community Health Improvement Plan: 2019	continuum of access to healthcare	access to healthy food		No	https://www.columbus.gov/uploadedFiles/Columbus/Departments/Public_Health/New_Programs/Community_Health_Planning/CHIP_2019Report_6.30.2020.pdf
OK	1	Tulsa City-County Health Department	500k-999k	Urban	Yes	Tulsa County 2017: Community Health Improvement Plan	continuum of access to healthcare	access to healthy food		No	https://tulsa-health.org/wp-content/uploads/2023/06/Tulsa-County-Community-Health-Improvement-Plan-2017.pdf

State	#of plans reviewed in state	Name of health department	Population size category	Urban or Rural	PHAB ACRED (yes/no)	Name of plan	1st Type of PM	2nd Type of PM	3rd Type of PM	Use logic models (yes/no)	Link to plan
OR	1	Washington County Department of Health and Human Services	500k-999k	Urban	Yes	2020-2023 Washington County Community Health Improvement Plan	continuum of access to healthcare	access to healthy food		No	https://www.washingtoncountyor.gov/hhs/documents/community-health-improvement-plan-chip/download?inline
PA	2	Philadelphia Department of Public Health	1MM+	Urban	Yes	Philadelphia's 2018-2022 Community Health Improvement Plan	continuum of access to healthcare	access to healthy food		No	https://www.phila.gov/media/20181105153040/CHIPReport_FINAL_singlepgs.pdf
		Philadelphia Department of Public Health	1MM+	Urban	Yes	Philadelphia Department of Public Health Strategic Plan 2018-2021	continuum of access to healthcare	access to healthy food	climate change	No	https://www.phila.gov/media/20181105150414/StrategicPlan-2018-2021.pdf
RI	0										
SC	0										
SD	1	Sioux Falls City Health Department	100k-249k	Urban	No	2022-2025 Sioux Falls Community Health Improvement Plan	continuum of access to healthcare	access to healthy food		No	https://livewellsiouxfalls.org/images/uploads/main/HD22_025_CHIP_Final.pdf
TN	2	Metro Public Health Department	500k-999k	Urban	Yes	Healthy Nashville Community Health Improvement Plan 2020-2022	continuum of access to healthcare	access to healthy food		No	https://www.vumc.org/communityhealthimprovement/sites/default/files/2020-2022%20CHIP%20Final.pdf
		Rutherford County Health Department	250k-499k	Urban	No	Rutherford County TN Community Health Improvement Plan 2019-2022	continuum of access to healthcare	access to healthy food		No	https://www.vumc.org/communityhealthimprovement/sites/default/files/CHIP%20Rutherford%20County%202.3.20%20final.pdf
TX	2	Austin/Travis County Health and Human Services Department	1MM+	Urban	No	Community Health Improvement Plan Austin/ Travis County, Texas August 2018	continuum of access to healthcare	access to healthy food	climate change	No	https://www.austintexas.gov/sites/default/files/files/Health/CHA-CHIP/2018_Travis_County_CHIP_FINAL_9.12.18.pdf
		Williamson County and Citites Health District	500k-999k	Urban	Yes	2020-2022 Williamson County Community Health Improvement	continuum of access to healthcare	access to healthy food	climate change	No	https://www.healthywilliamsoncounty.org/content/sites/wcchd/2020-2022chip/2020-2022_WilCo_CHIP_Final_-_Resilient_WilCo_Update.pdf
UT	1	Tooele County Health Department	25k-49k	Urban	Yes	"Tooele County Community Health Improvement Plan (CHIP) 2018-2022"	continuum of access to healthcare	access to healthy food		No	https://tooelehealth.org/wp-content/uploads/2018/07/Final-CHIP-2018...2022.pdf

State	#of plans reviewed in state	Name of health department	Population size category	Urban or Rural	PHAB ACRED (yes/no)	Name of plan	1st Type of PM	2nd Type of PM	3rd Type of PM	Use logic models (yes/no)	Link to plan
VA	1	Fairfax County Health District	1MM+	Urban	Yes	Live Healthy Fairfax Community Health Improvement Plan 2019-2023	continuum of access to healthcare	access to healthy food		No	https://www.livehealthyfairfax.org/content/sites/fairfax/community-health-improvement-plan-2019-2023.pdf
VT	0										
WA	2	Whatcom County Health Department	100k-249k	Urban	Yes	Healthy Whatcom Community Health Improvement Plan 2022-2026	continuum of access to healthcare	access to healthy food		No	https://healthywhatcom.org/wp-content/uploads/2022/03/Healthy-Whatcom-CHIP.pdf
		Tacoma-Pierce County Health Department	500k-999k	Urban	Yes	Community Health Improvement Plan Pierce County 2020	continuum of access to healthcare	access to healthy food		No	https://tpchd.org/wp-content/uploads/2023/12/2020-Pierce-County-CHIP.pdf
WI	2	Milwaukee City Health Department	500k-999k	Urban	No	Milwaukee 2017-2022 Community Health Improvement Plan	continuum of access to healthcare	access to healthy food		No	https://city.milwaukee.gov/ImageLibrary/Groups/healthAuthors/Accredit/MKEelevate/20171109PP-Report-MKEElevateCHIP.pdf
		Oneida County Health Department	25k-49k	Rural	Yes	Oneida County Health Department Strategic Plan 2020-2023	continuum of access to healthcare			No	https://publichealth.oneidacountywi.gov/wp-content/uploads/2020/06/2020-2023-Strategic-Plan-Final.pdf
WV	1	Cabell-Huntingon Health Department	50K-99k	Urban	Yes	Healthy Vision 2020: A Comprehensive Community Health Improvement Plan for Cabell County	continuum of access to healthcare	access to healthy food		No	https://cabellhealth.org/wp-content/uploads/2019/12/CHHD-CHIP-11-1-16.pdf
WY	1	Teton County Health Department	<25k	Rural	No	Healthy Teton County: 2019 Community Health Improvement Plan	continuum of access to healthcare	access to healthy food		No	https://www.tetoncountywy.gov/DocumentCenter/View/11897/2019-Community-Health-Improvement-Plan-

Appendix B

Developing Health Equity Performance Measures

Goal: Conduct an environmental scan on local health departments' (LHDs) current processes of defining, measuring, and tracking progress towards health equity as part of their performance evaluation.

Methodology

Research questions:

1. How are local health departments defining health equity, including other sources they might be taking those definitions from?
2. How are local health departments currently measuring and tracking progress towards more equitable health outcomes?

The below tables present search terms using the SPIDER framework covering the following:

S-ample

PI-Phenomenon of Interest

D-esign of the study

E-valuation

R-esearch Type

DEFINITION OF HEALTH EQUITY SEARCH TERMS TABLE

	Search Terms
S	"public health department", or "local health department", or "city health department", or "county health department", or "department of health", or "department of health services", or " board of health", or "emergency services", or "health and human services", or "health commission", or "health authority"
P of I	"health equit*", or "social determinants of health", or "health in all policies", or "health disparit*", or "health inequit*", or "minority health", or "racial disparities", or "ethnic disparities", or "racial/ethnic disparities", or "disparities", or "social justice", or "distributive justice", "inequit*", or "equit*", or "racism", or "poverty", "health gaps", "health inequal*", "social inequalities in health", or "health lens analysis"
D	"framework", "model", "outline", "program", "curriculum", or "pilot"
E	
R	"qualitative", or "quantitative", or "mixed method", or "review", or "case reports", or "editorials"

PERFORMANCE MEASURES CURRENTLY USED SEARCH TERMS TABLE

	Search Terms
S	"public health department", or "local health department", or "city health department", or "county health department", or "department of health", or "department of health services", or " board of health", or "emergency services", or "health and human services", or "health commission", or "health authority", or "public health agency"
P of I	"health equit*", or "public health practice", or "health equity measurement", or, "health equity practice", or "health equity measure*", or "health equity assess*", or "health equity policy", or "health equity practice", or "health equity frameworks", or "health equity", or "performance meas*", or "systems change", or "evaluation", or "health impact assessment", or "health in all policies", or "health impact assessment", or "health equity advocacy", or "social determinants of health measure*", or "health inequit* measure*", or "minority health meaure*", "racial disparities measure*", or "ethnic disparities measure*", or "racial/ethnic disparities measure*", or "social inequalities in health measure*", or "social vulnerability index" or "indicator" or "culture of health"
D	"framework", "model", "outline", "program", "curriculum", or "pilot", or intervention
E	
R	"qualitative", or "quantitative", or "mixed method", or "review", or "case reports", or "editorials", or "evaluation studies"

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