CALIFORNIA ACCOUNTABLE COMMUNITIES FOR HEALTH INITIATIVE

CACHI

...The Next Generation of Health System Transformation

CACHI: DATA-RELATED MILESTONES

GUIDANCE FOR ACCOUNTABLE COMMUNITIES OF HEALTH

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INTRODUCTION

Data capacity is one of the seven definitional elements for the California Accountable Communities of Health Initiative (CACHI). This includes the infrastructure, capacity and agreements for collecting, analyzing and sharing financial, community and population-level data across a variety of partners.[1] Data can give ACHs the ability to see not only what is working on the ground but also how—and why—change is happening (or not happening) across time and their regions.

> "ACHs have a broad range of core data needs and must define a set of agreed upon metrics, including general population data related to the target geography, community health data, prevalence data for selected conditions, and clinical, utilization and cost data.
>
> Data and information sharing will be needed at all stages of development and implementation, from needs assessment and baseline to ongoing monitoring and evaluation."
>
> **Accountable Communities for Health Data Sharing Toolkit**
> UC Berkeley Center for Healthcare Organizational + Innovation Research (CHOIR)

Data can help local leaders, providers and community members understand their populations and identify opportunities for improvement, guide local learning and empower ACHs to prioritize their resources and focus their attention to drive change.

ACHs can consider using data for four key purposes:

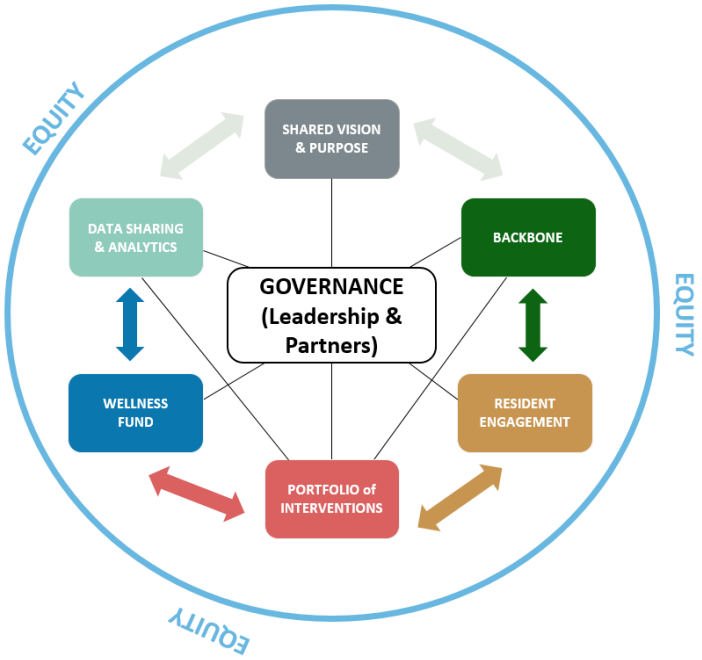
- ☑ Measuring outcomes to provide an overview and understanding of ACH progress
- ☑ Measuring interventions and activities to support continuous quality improvement
- ☑ Promoting health equity
- ☑ Communicating key data to drive action and share progress that demonstrates accountability to partners and the community at large

The data-related milestones for CACHI sites closely support these purposes, including selecting outcome measures and indicators of success, equity considerations in measures and reporting on progress (see Appendix 1 for ACH data-related milestones by year).

[1] California Accountable Communities for Health Initiative – Request for Proposals. 2016.

Much of this guidance document focuses on what data and measurement an ACH will need to understand its progress towards desired outcomes, the effectiveness of its selected interventions and the overall impact of the ACH's infrastructure[2] and presence in the community. Its guidance also emphasizes connections between outcomes, interventions and infrastructure, and creating opportunities for alignment, including shared measurement, coordinated messaging and the incorporation of an equity lens. See the CACHI "wheel" in Figure 1 below for an overview of these connections and opportunities.

Figure 1



This guidance document is presented in the form of questions, organized around CACHI data-related milestones. However, answering these questions is not necessarily a linear process, as these milestones are often interconnected, and content may relate to multiple milestones.

In some cases, questions in this document may prompt for information that has not yet been decided, and responses to questions about one milestone could inform or guide decisions about another milestone. Just as an ACH's process to develop and refine a Portfolio of Interventions is ongoing and iterative, an ACH's use of data is also constantly evolving.

[2] ACH infrastructure refers to the collaborative partnerships and convening, resident engagement, Wellness Fund, Portfolio of Interventions (POI), data capacity and other elements that represent the collective activity, alignment and accountability of the whole.

Using This Guidance

ACHs may have already developed a data strategy or additional operational documentation that addresses many of the questions in this guidance document; this guidance is not intended to replace or disregard those efforts. Thinking through some of the prompts included in this document may result in additional depth or the addition of new considerations to an ACH's plan.

ACHs should use these questions and this document in a manner that best suits their needs.

TABLE OF CONTENTS

This document provides guidance on the CACHI data-related milestones. Since there is some overlap across data-related milestones, this document has been organized into thematic sections: Measures, Equity, Communicating Progress, and Data Sharing.

OUTCOME MEASURES AND INDICATORS OF SUCCESS

ACHs should select measures that can provide an overview and an understanding of their progress across their Portfolio of Interventions, as well as measures that are used for monitoring and continuous quality improvement. And since ACHs are multi-level, interconnected initiatives, they will also need to adopt measures that address aspects beyond their Portfolio of Interventions, such as processes or systems changes associated with the ACH. This section includes questions and considerations related to measure selection, the connection between measures and interventions, and operationalizing measures.

> "Having stakeholders conceptually agree on the goals of the ACH and measuring progress toward those goals is essential for building partnerships, designing effective portfolios of activities, and securing financial commitments."
>
> **Accountable Communities for Health: Strategies for Financial Sustainability**
> JSI, May 2015

While people often use "measures," "indicators," and "metrics" interchangeably, it can be helpful to group different types of measures and provide a working definition for each. This document uses the following terminology:

Table 1: Definitions

Outcome Measures	As defined here, outcomes include both health and health-determinant outcomes, improved community conditions/social determinants of health and system changes. Health outcome measures are changes in the health of an individual, group, or population that may be attributable to an intervention or a set (portfolio) of interventions (e.g., reductions in diabetes prevalence). Improved health-determinants include housing, food systems, safety, and related aspects of the portfolio associated with the target condition which are not always included as health outcomes. System outcome measures may include improvements in ACH operations, processes, and practices (e.g., new community-clinical linkages, aligned data collection, deepened relationships), policy changes, and demonstrable improvements in disparities (closing the gap). Outcome measures may vary over time. Short-term outcomes are typically 1-3 years; medium-term outcomes are 3-5 years; and long-term outcome measures are for 5+ years.

Long-Term Outcome Measures	Long-term outcome measures are at the population health level, system level and ACH level. These outcomes may reflect the overall goal or health condition the ACH is hoping to improve: e.g., *the prevalence of diabetes in a county, or cardiovascular-related mortality rates, or schools ensure PE is taught in all grades, or expand access to meals for low-income children.* Although some interventions can produce results quickly, it may take many years to see statistically measurable changes and attribute them to the interventions. Furthermore, there may be significant lags in data collection.
Short- and Medium-Term Outcome Measures	These measures provide more detail about protective and risk factors that affect the long-term outcomes and may still be considered an outcome. Shorter-term outcomes are connected by evidence to longer-term outcomes and therefore serve to show progress toward the long-term outcomes listed. *For example: the physical activity rate of program participants, or smoking rates, or reductions in ER usage.*
Indicators of Success of the ACH	These are process measures that monitor ACH activities and implementation of the Portfolio of Interventions. These measures often include counts of services or reflect activities related to various interventions: i.e. outputs. Process data are often more readily available. *For example: percentage of people receiving a preventive service, or number of people successfully completing a training.* This also includes process measures that address ACH infrastructure such as governance agreements, levels of community engagement, or Wellness Fund implementation. They may also include policy discussions or changing practices within organizations. These measures may be more qualitative and may rely on ACH locally collected data. *For example: community member feedback about their levels of engagement with the ACH, evolving governance structures, or amount of money invested in the Wellness Fund.*

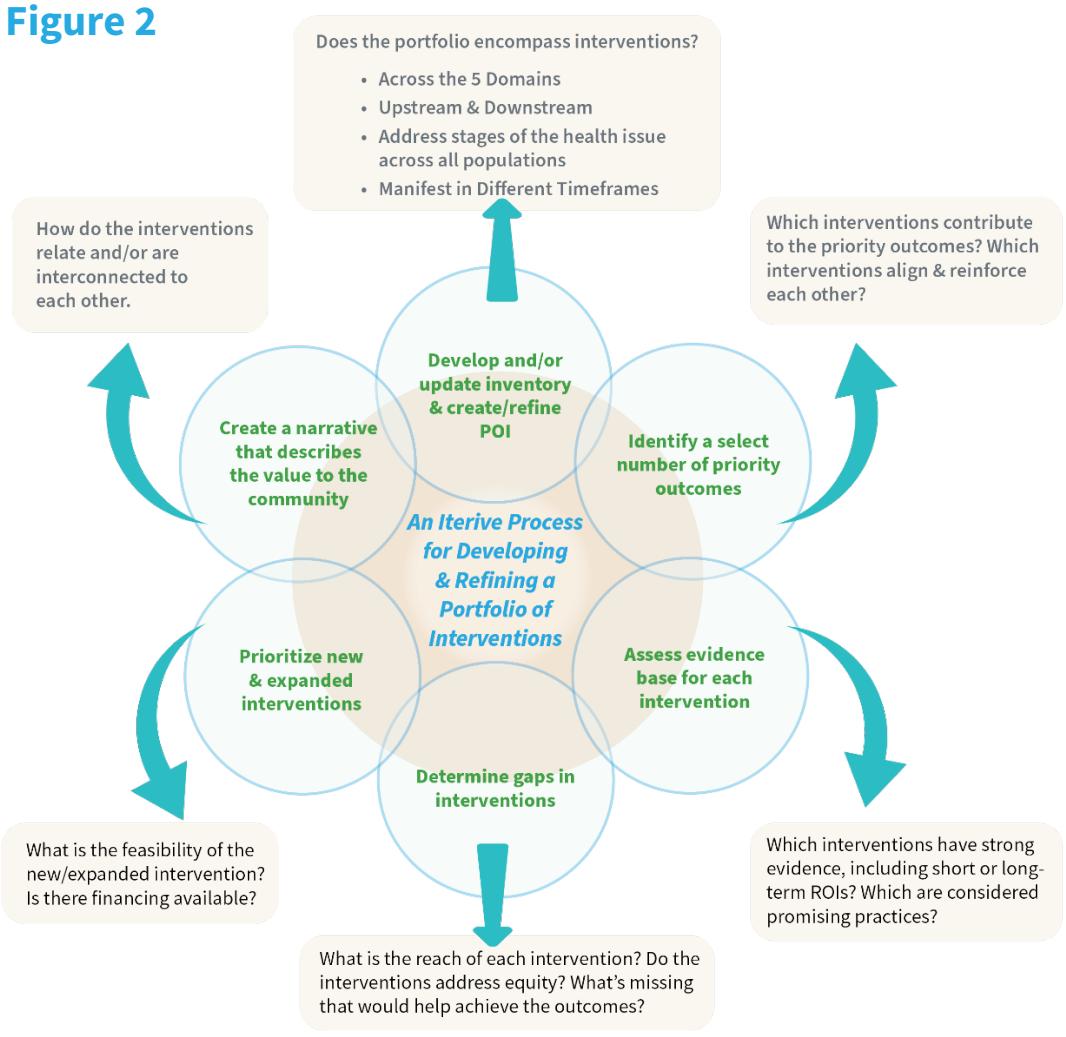
ACHs will likely use both quantitative and qualitative data for measuring outcomes and identifying indicators of success. Quantitative data for some measures could have already been collected and will be easier to access. Nevertheless, ACHs should also consider opportunities to collect and incorporate qualitative data in their measures.

Quantitative Data	Usually numeric data or information that can be converted into numbers. *For example, the number of community health workers trained, or the prevalence of cardiovascular disease in a county.*
Qualitative Data	Usually descriptive and conceptual information, may be categorized by properties, themes, and other identifiers. *For example, feedback from community health workers about their training experiences.*

Measures Reflect Interventions and Infrastructure

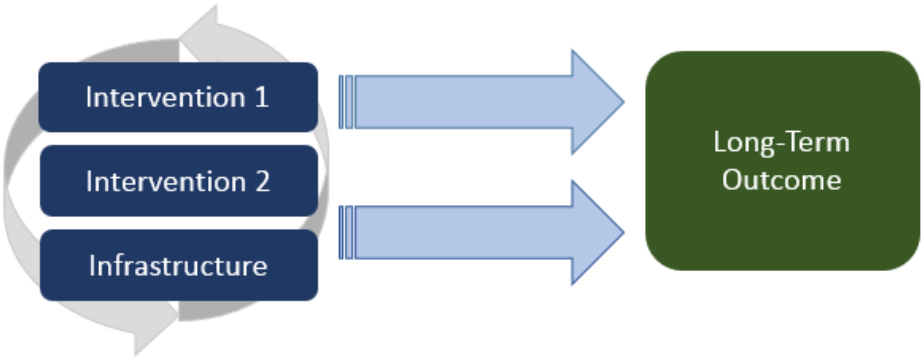
An ACH's Portfolio of Interventions is designed to be mutually reinforcing and drive toward intersecting outcomes. The ACH is premised on the idea that achieving change at a population scale requires a set of interventions that consistently reinforce each other to enhance the impact of any single activity. Selected interventions work together to achieve goals, which more effectively improve outcomes than separate individual interventions could produce. The Portfolio's success is also supported and influenced by the ACH infrastructure as previously depicted in Figure 1. Figure 2 drills down to depict the cycle of development and assessment specific to the Portfolio of Interventions.

Figure 2



There should be a logical connection between an ACH's interventions and outcome measure(s), where the interventions work together to shape the outcome and are influenced by its infrastructure, such that the whole represents more than the sum of the parts (see Figure 3, next page).

Figure 3



Each ACH should select outcome measures and indicators of success that are logically connected to their Portfolio of Interventions and that provide an overview of progress and, potentially, the opportunity to inform quality improvement activities. Outcome measures and indicators of success should reflect both community-level and program-level drivers of improved outcomes, as well as infrastructure.

The questions below could be used with an ACH Leadership Team or backbone staff to help articulate the connection between the ACH's selected interventions and outcome measures (i.e., the ACH's theory of change).[3]

- ☑ What are the long-term outcomes of your ACH's work?
- ☑ What are the specific outcomes for each intervention, and how do they contribute to the overarching outcomes?
- ☑ To what extent do interventions interact with or mutually reinforce each other to produce different outcomes than would be achieved on their own?
- ☑ How does your ACH's infrastructure contribute to the selected outcomes? Does your infrastructure support your interventions?
- ☑ Do interventions, when combined, reach people differently than each intervention would on its own? Are your interventions reaching people multiple times?

Developing interventions and outcomes should involve residents and be rooted in the ACH's priorities. There are multiple approaches to this conversation. *For example, an ACH may have 2-5 priority outcomes and want to focus on selecting which interventions are most likely to have an impact and what infrastructure is needed.* Mapping out which interventions lead to priority

[3] Questions adapted from the CACHI webinar: Identifying and Measuring Outcomes, January 2018

outcomes and where there may be overlap (or reinforcement) can help prioritize which interventions are ultimately selected.

Alternately, an ACH may have developed an inventory of interventions and existing infrastructure in the community and needs to agree on the shared outcomes that might result from those interventions. Mapping out which interventions lead to which outcomes, and seeing which outcomes have the most overlapping (or reinforcing) interventions, can help determine which outcomes are selected.

Additional considerations:

- ☑ Has your ACH identified disconnects between your selected outcomes and interventions? If so, how will your ACH fill in these gaps? Are there outcome measures that may better reflect your Portfolio? *For example, if your interventions focus on addressing asthma in clinical settings but your measures focus on environmental outcomes, you may wish to include more clinical outcome measures as well.*

- ☑ Has your ACH identified indicators that provide sufficient detail about your selected interventions to support continuous quality improvement activities? *ACHs may not need to identify indicators for each intervention in their Portfolio; however, ACHs should ensure they have a plan to know when an intervention is not working as intended, or when they might need to modify, add, or drop interventions to drive the outcomes.*

- ☑ Has your ACH identified outcome measures that will allow you to attribute changes to the overall work of the intervention and ACH activities? Can you expect to see change over time in your selected outcome measures based on your selected Portfolio of Interventions implementation and infrastructure activities?

- ☑ Does your ACH have a mix of qualitative and quantitative indicators and measures that will provide a robust understanding of how your selected interventions are impacting the community? Do your measures include community perspectives on selected interventions and outcomes?

- ☑ Does your ACH need to update your logic model or any programmatic documents to reflect changes in selected outcome measures and interventions, or to better connect measures and interventions? Is your logic model aligned with your selected outcomes and interventions?

Ensuring that your selected outcome measures and indicators are connected to your interventions and infrastructure may be a concern for ACHs that are leveraging existing county health department surveillance, or repurposing reports from other initiatives as their

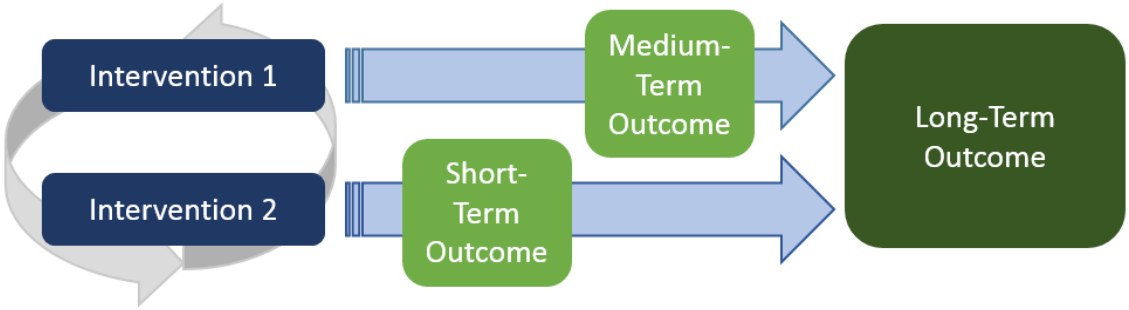
primary data source. While ACHs do not need to reinvent measures or develop new data sources, existing resources, particularly public health surveillance data, may be best for long- and medium-term outcomes. Relying solely on these data sources won't necessarily provide ACHs with a full overview of their progress or the ability to support continuous quality improvement activities. In addition, these data sources may not help an ACH understand the impact of its infrastructure.

Measures Reflect Process and Outcome

Ideally, your ACH will have selected a mix of outcome measures and indicators of success that are related to and build on each other to provide a more comprehensive picture of ACH activities and community health.

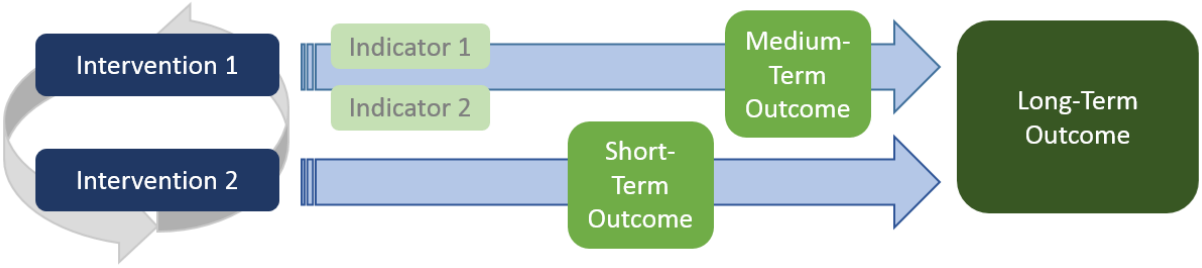
Only focusing on long-term outcomes may not be sufficient or timely enough to demonstrate progress or understand changes. ACHs should also include medium-term and short-term outcome measures to more quickly understand the effects of their interventions (Figure 4).

Figure 4



In addition to measuring outcomes, ACHs may also need indicators of success for some (not necessarily all) of the interventions. These indicators provide ACHs with the ability to monitor interventions with an eye toward continuous quality improvement and to inform any decisions about whether interventions should remain in the Portfolio over time (see Figure 5).

Figure 5

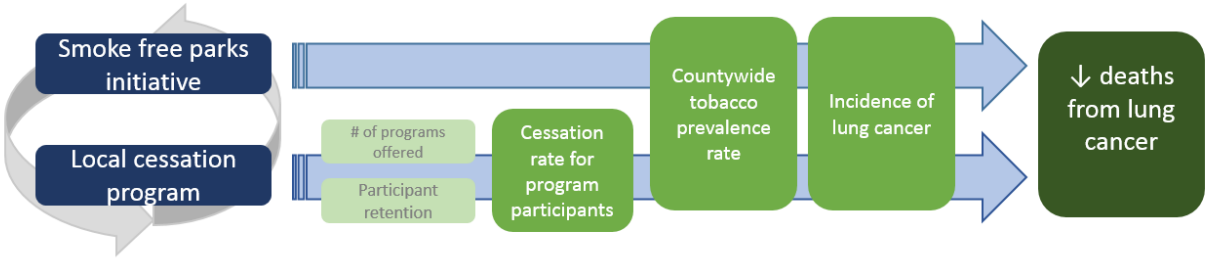


In the example below (Figure 6), reducing deaths from lung cancer is the long-term outcome of interest. Multiple reinforcing interventions support this outcome, including passing smoke-free parks policies and providing a local cessation program to help people quit smoking.

While some of the outcome measures are shared across initiatives, like the tobacco prevalence rate or incidence of lung cancer, shorter-term outcomes, like how successful the cessation program is in helping people quit, are also important. These short- and medium-term outcomes may be intervention specific, or domain specific, or may be shared across the Portfolio (see table 3 and 4 below).

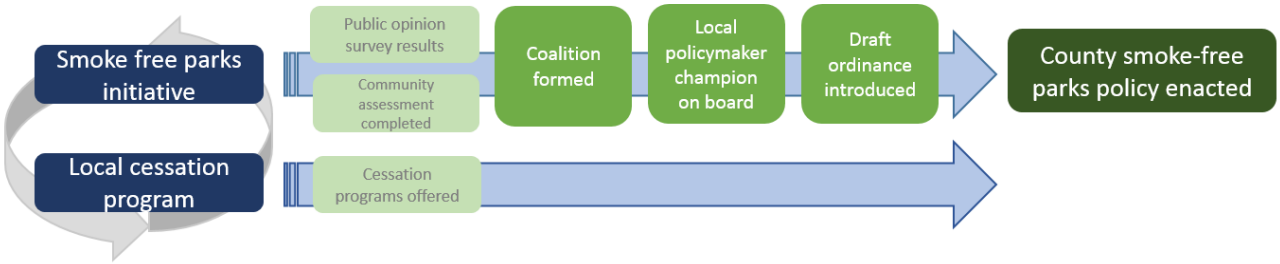
Initiative-specific indicators can also help interpret progress toward the outcomes and identify areas for continuous quality improvement. *For example, if the local cessation program only offers a class once per year, or if the program struggles to retain its participants after the first session.*

Figure 6



Relying too heavily on long-term outcome measures may mean you have no way to report progress or show change until several years after the fact. Relying too heavily on process measures limits your ability to describe broader impacts and demonstrate value.

Figure 7



Policy changes and additional upstream system changes that lead to improvements in health and health equity can also be included as outcomes, and measures may be more focused on key process steps leading to the policy change (Figure 7, above). The BUILD Outcomes Framework describes the steps toward system change that may be helpful in framing potential indicators (Figure 8, below).[4]

Figure 8

[4]Getting BUILD Ready: Tools for Moving Resources, Attention, and Action upstream to Drive Sustainable Improvements in Community Health. The BUILD Health Challenge. 2019. https://buildhealthchallenge.org/resources/getting-build-ready/

Consider what types of measures your ACH is using:

- ☑ What is the balance of outcome measures and indicators of success your ACH has selected? Do you have a mix of short-, medium-, and long-term outcome measures? Are there indicators of success? *You can use a chart like Table 2, below, for a quick way to map this out.*

- ☑ If your selected measures are primarily long-term outcome measures, how will you monitor the implementation of your interventions and support quality improvement activities?

- ☑ If your selected measures are primarily indicators of success of specific interventions, how will you know that your Portfolio of Interventions or implementation activities are having the intended impacts on your target population or community outcomes?

Table 2: Balancing Measures

Measure	Indicator of Success	Short- or Medium-Term Outcome	Long-Term Outcome
County diabetes prevalence			X
# of trained community health workers	X		
# of diabetes program participants	X		
# of program participants with diabetes under control 3 months post program		X	

ACHs also need to consider how their selected measures and interventions are balanced across the five domains and whether some domains rely more heavily on one type of measure than another. *Note: Some measures may only be measured in one domain or setting, but changes result from multiple mutually reinforcing interventions.*

Table 3: CACHI Domains

Clinical	Services delivered in the health care setting, including primary and coordinated care, primary prevention, and secondary prevention.
Community	Programs and social services that provide support to community members and take place outside of the healthcare system in community settings, schools, community-based organizations, etc.
Clinical-Community Linkages	Programs or activities that connect clinical services with community programs or social services. *For example, community health workers, referral systems, screening for social determinants of health, etc.*
Policy and Systems	Public and private practices, rules, laws, and regulatory changes, for example, zoning rules, health plan incentives, etc.
Environment	Changes in social, community, or physical environments that support healthy behaviors. *For example, walking and biking trails.*

Table 4: Example: Diabetes Measures by Domain[5]

Domains	Sample Measures
Clinical	• Emergency department visit rate • HbA1c control (<7.0%)
Community	• # of participants in the Diabetes Prevention Program • # of community members receiving food assistance
Clinical-Community Linkages	• % of people with diabetes and pre-diabetes who have regular contact with a care coordinator • % of people with pre-diabetes referred to and subsequently enrolled in Diabetes Prevention Program • # of community health workers employed in the community
Policy and Systems	• # of organizations endorsing shared ACH policy agenda • # of new ACH partnerships established
Environment	• Retail Food Environment Index score

[5] Example measures adapted from Accountable Communities for Health: Strategies for Financial Sustainability. JSI. May 2015.

Success in the Clinical-Community Linkages and Policy and Systems domains may be particularly dependent on systems changes. ACHs may also wish to monitor indicators of success that reflect these interdependencies. It is not possible to separate the success of the ACH from the successful implementation of the Portfolio of Interventions to improve outcomes. See sample measures of ACH infrastructure and system change in Table 5, below. These indicators can be included in specific domains or listed separately.

Table 5: Measuring ACH Infrastructure and System Change[6]

Sample Measures
• Multi-sector representation in governance structures or increase in represented sectors • Leadership Team members demonstrate engagement or active participation • Partners increase the scope/type of their collaborative work and collaborate versus compete on funding opportunities • Partners communicate with each other, independently of the backbone • ACH has adopted a value proposition • ACH backbone and partnering organizations have adopted equity and inclusion policies • Changes in how partnering organizations behave (both formal and informal practices) • Community engagement increases over time • ACH decision making involves community input • Legislation or local policy passed in support of the initiative's goals • Partners make decisions based on data • ACH demonstrates progress implementing its sustainability strategy • Wellness Fund growth (investors, dollars, priorities, etc.) • Funders redirect funds to support initiative goals.

Additional ideas for infrastructure and system change measures can be found in the CACHI Evaluation Annual Partner Survey and FSG's 27 Indicators of Backbone Effectiveness.[7]

Measures Are Relevant and Understandable

ACHs should ensure that selected outcome measures and indicators of success are relevant for their community and appropriate for their selected audience(s). Some measures may be

[6] Infrastructure and system change measures adapted from the Funders Forum on Accountable Health ACH logic model. http://accountablehealth.gwu.edu/funders-forum/logic-model

[7] https://www.fsg.org/publications/understanding-value-backbone-organizations-collective-impact

complex or abstract, making it difficult for partners and stakeholders to understand the meaning, or see the connection to the intervention or desired outcomes.

When measures are not relevant or understandable, they lose value and power as a tool for communication. See *Communicating Findings* section for additional detail.

Some measures may not be actionable or may paint the community or intervention in a more negative light. ACHs may be inclined to avoid measures that "make their community look bad" or that risk stigmatizing a population or geographic area within their community. ACHs should not automatically reject measures that reflect poor or lagging outcomes as part of their measure sets. However, "negative" measures can potentially be overwhelming or de-motivating. ACHs should be careful to balance these measures with others that are actionable or reflect momentum.

Considerations:

- ☑ Do the selected measures have the potential to support improved decision-making? *This can include either consumer/community decision-making (i.e., changing behavior or providing education and awareness around important topics) or stakeholder/leadership decision-making.*

- ☑ Will the selected measures improve accountability? Who do you hope to hold accountable and for what purpose? How will you hold them accountable and ensure mechanisms of accountability for your ACH overall? *This could include health or social sector partners (i.e., comparing performance on quality measures by provider group to spur improvement and support shared learning) or ensuring the ACH has an overall community engagement strategy to transparently share and discuss results.*

- ☑ Does your community believe the selected measures are important? *Some measures may not be a priority for the community or stakeholders do not believe the selected measure accurately reflects their concerns. In some cases, the selected measure may not be aligned with clinical practice guidelines or other evidence-based approaches.*

- ☑ Does your community believe the selected measures are actionable? *Stakeholders may be concerned if measures focus too much on negative aspects of the community and may feel like an outcome is too hard to improve. Sometimes, focusing on the positive may portray a measure as more actionable. For example, clinical diabetes measures can be reported as the percent of people who do not have their diabetes under control (the commonly used HEDIS "poor control" measure), or the percent of people*

who do have their diabetes under control.

- ☑ Are you using nationally endorsed or nationally standardized outcome measures where available? *Stakeholders may be more likely to support nationally endorsed measures over homegrown measures, to ensure validity and alignment. Alternately, stakeholders may be more in favor of locally developed measures to more accurately reflect their transformative efforts.*

Measures Are Measurable

For each selected outcome measure or indicator of success, ACHs need to identify any available data or reporting source, its frequency, measurement periods, data lag, and specifications.

Data or Reporting Source

What is the data source or reporting source for each of your selected outcome measures and indicators of success? Data sources can be either primary—where the ACH collects the data directly (e.g., partner reporting, participant data, interviews, etc.)—or secondary—where the ACH uses data collected by others (e.g., clinical measures reported by provider partners, reports available from local health plans or health systems, statewide survey data, etc.).

Consider:

- ☑ Is there a local measure "owner" who already produces the measure? *For example, a local health department or hospital may already collect the data and conduct analysis. A local health plan may already create annual reports that include a measure your ACH is interested in or a local Health Information Exchange (HIE) may already collect data.*

- ☑ Will the measure require new data collection?
  This could include things like a new screening tool embedded into an electronic health record or fielding a new program participant survey. Data collection may be qualitative or quantitative. System change and infrastructure measures may be more likely to require new data collection.

- ☑ Will the measure require new partner reporting?
  This could include things like clinics reporting quality measures to the ACH or local community-based programs submitting participant reports. System change measures may also be more likely to require new partner reporting.

- ☑ Does your measure source provide the "raw" data, or is the measure already calculated? *This could include things like a managed care organization calculating a measure from its administrative (claims) data or a local organization providing participant information that the ACH will need to aggregate. A local Health Information Exchange (HIE) that already collects data may be able to aggregate or de-duplicate information for you.*

For your selected measures with known data sources:

- ☑ Does your ACH have access to or the ability to request the data?

- ☑ Will a data sharing agreement be required? *See Data Sharing section below.*

- ☑ How will you ensure confidentiality for qualitative interview, survey data, or other sensitive information? *Some organization level information may also be considered business confidential or particularly sensitive in the community; ACHs may need to consider confidentiality for partner reporting of system change or infrastructure type measures.*

- ☑ What granularity is available in the data? Will you be able to explore any potential disparities using available data? *Consider geography (are data available at the county level, census tract or zip code) and other potential stratifications (are data available by race, ethnicity, language, age, gender, income level, sexual identity, etc.). See Equity section below.*

Note also that selected measures within current data sources may change over time. *For example, a certain question may no longer be included in a statewide survey, or is only included every five years, resulting in no known data source or a limited data source.*

For your selected measures that do not have a known data source:

- ☑ Do you plan to develop a new data source?

- ☑ Are there other opportunities or infrastructure in your community that you could leverage to develop a new data source? *For example, if the community is investing in a Health Information Exchange, can those data be used for your ACH measurement?*

- ☑ Have you considered replacing the selected measure with an alternate measure that is more readily available?

Data Frequency / Availability

Ideally, ACHs will use the most current data available for a given measure. Data are often available more frequently for short-term outcome measures and indicators of success. However, some data may only be available annually or (particularly for smaller geographies or populations) for multiple years or combined.

- ☑ How often does the measure owner produce the measure or release the report? How often could you request raw data from the data source? (annually/quarterly/monthly/other).

- ☑ If the measure requires new data collection or partner reporting, how frequently will this take place? *Consider partner burden and ability to report or collect the data.*

Measurement Period / Data Lag

In addition to how frequently data for a measure will be available, it is important to understand *when* data for selected measures will be available.

- ☑ What is the most current available measurement period for a selected measure?

- ☑ How much of a lag is there between the measurement period and when the data are available? *For example: CY 2015 data are released in July 2017, resulting in an 18-month lag.*

- ☑ Given your current data sources and the data lag, when will data reflecting the CACHI grant timeframe be available for each measure? *For example, when will you have data from a measurement period that reflects your interventions and activities?*

ACHs may want to compare availability with the type of measure. Will you be able to easily report on indicators of success and short-term outcomes for the CACHI period but not be able to see other outcomes until later?

- ☑ If you will not have available data for a period that reflects your interventions and activities, have you considered alternate data sources or measures?

Understanding the timing of your ability to report on Portfolio of Interventions and implementation activities may have implications for demonstrating value, seeking additional funding to sustain this work, and communicating successes. In some cases, ACHs may need to trade the perfect measure that doesn't have the right level of granularity, or has too long of a lag, for a less perfect measure that still reflects implementation activities and is available in time.

Measures Are Operational

For each selected outcome measure and indicator of success, ACHs should ensure that they are operationalized with enough detail to enable consistent reporting. Some considerations:

- ☑ If your ACH is developing your own measures or you have selected a measure that will require partner reporting and/or data sharing, is the measure clearly documented? *That is, can you describe the fields or data elements that are needed or how the measure is calculated?*

- ☑ If your ACH is responsible for tracking or collecting data for a measure, is there a clearly defined process and owner within the backbone? *For example, if the ACH is measuring the level of community member engagement in their public meetings, is a staff person responsible for collecting sign-in sheets and/or counting the number of community members at each meeting?*

- ☑ Are all key terms defined? *For example, if you are asking partners to report on the number of high-risk pregnant women they referred to an intervention this quarter, how should they define high-risk pregnancy? What exactly is the numerator/denominator?*

- ☑ If your ACH is using existing measures, have you clearly agreed on and documented your expectations? *For example, this year, we ask all partners to report NQF 0018, using HEDIS 2017 specifications. Or, we are asking all partners to report on new policies or procedures that have been passed and, as part of that, we expect them to submit copies of any new policies.*

- ☑ Can all partners who will be reporting or pulling data use the same specifications or definitions? Are data elements similar enough across partners or will there be variation? *For example, one clinic can only report NQF 0018 using HEDIS 2016 specifications. Is this acceptable? Will your ACH still be able to aggregate data?*

If your ACH has not yet operationalized your selected outcome measures and indicators of success, is there an individual, team, or workgroup with clear responsibilities and timeline for making these decisions? Will stakeholders (particularly those who may be asked to report) be involved in the process?

Resources

Metrics for Healthy Communities
This website provides measures, data sources and logic models for community development and health organizations working together to improve social determinants of health. This site can help develop connections between outcomes and interventions, and identify outcome measure and indicator options. **metricsforhealthycommunities.org**

Buying Value Measure Selection Tool
This suite of tools is intended to assist in creating healthcare quality measure sets. The tools are centered on an interactive spreadsheet where users can enter data and review decision inputs for consideration. Examples of measure selection criteria are also provided.
While this tool is pre-populated with healthcare quality measures, users can customize with their own public health or community selected measures and their own selection criteria.
www.buyingvalue.org/resources/toolkit

Potential Data Sources
There are many websites that have compiled indicators and data and targets; these are provided as a starting place for ACHs that may be looking for measure ideas or available data:

- Let's Get Healthy California, **letsgethealthy.ca.gov**
- Healthy Places Index, **healthyplacesindex.org**
- County Health Rankings, **www.countyhealthrankings.org**

EQUITY CONSIDERATIONS

This section includes questions and considerations for the following milestones, indicators, and/or metrics and/or targets to include equity considerations.

"We count what matters. Metrics that measure and track our progress on the determinants of health can help set priorities and inform necessary actions to keep all Americans healthy, lower the cost of healthcare, increase productivity, improve quality of life, and ensure that everyone has an equal opportunity to prosper and achieve his or her full potential."

Measuring What Works to Achieve Health Equity:
Metrics for the Determinants of Health Prevention Institute
June 2015

While the term health equity is widely used, there is not always a common understanding of what it means and what implications it may have for action. We also tend to use health inequities and health disparities interchangeably, but it can be helpful to differentiate.

Table 6. Definitions

Health Equity	**Health equity** is achieved when every person has the opportunity to *"attain his or her full health potential"* and no one is *"disadvantaged from achieving this potential because of social position or other socially determined circumstances."* [8]
Health Inequities	Disparities in health that are a result of systematic, *avoidable*, and unjust social and economic policies and practices that create barriers to opportunity.
Health Disparities	*Differences* in health status or health outcomes between groups of people. Not all disparities (differences) are inequities. ACHs may need to consider the roles power and privilege play, and the connections between disparities and inequities.

Measuring disparities helps to inform an ACH's equity agenda, but note that only measuring and documenting disparities is not enough for an ACH to fully infuse equity considerations into their work. ACHs have been asked to focus on health inequities from the outset. To do this, ACHs should also consider how their community engagement efforts, Portfolio of

[8] https://www.cdc.gov/chronicdisease/healthequity/index.htm

Interventions, Wellness Fund, governance and communication strategies all address the social determinants of health[9] and the root causes of health inequities.[10]

There are two main ways to think about root causes of health inequities:

- ☑ Intrapersonal, interpersonal, institutional and systemic mechanisms that organize the distribution of power and resources differentially across lines of race, gender, class, sexual orientation, gender expression, and other dimensions of individual and group identity.

- ☑ The unequal allocation of power and resources—including goods, services, and societal attention—which manifest in unequal social, economic, and environmental conditions (also called the social determinants of health, see Appendix 2).

The factors that make up the root causes of health inequity are diverse, complex, evolving, and interdependent in nature. It is important for ACHs to understand the underlying causes and conditions of health inequities to inform equally complex and effective interventions to promote health equity. [11] It is also important for ACHs to reflect this in their data and measurement.

Addressing Health Inequities

When working to address health inequities and health disparities that may be driving those inequities, ACHs should use an equity lens to determine if their selected interventions to address health disparities and inequities are actually equitable—are they affordable, accessible and addressing the underlying drivers of the disparity and not just the condition?

For ACHs that are seeking systemic changes, consider starting with a disparity that leads to a focus on addressing inequities. ACHs may also wish to focus on opportunities to improve, rather than use a more negative, or deficit, framing for their equity work.

- ☑ For selected outcome measures and indicators of success where you have identified potential disparities or areas for improvement, how is this information being used to inform implementation?

- ☑ Has your ACH focused on a specific population or geography (beyond your initial selection of target population and geography to establish your ACH)? (*Why did your ACH focus on this specific population or geography? Was it data informed? Community*

[9] See Appendix 2 for additional detail on social determinants of health.
[10] The CACHI.org website provides a number of resources related to incorporating an equity lens and improving health equity through other elements of the Accountable Community of Health model.
[11] Communities in Action: Pathways to Health Equity. 2017. The National Academies Press. https://www.nap.edu/catalog/24624/communities-in-action-pathways-to-health-equity

informed? Based on the capacity and geographic reach of the ACH?)

- ☑ Has your ACH prioritized certain interventions in response to known disparities?

- ☑ Does your ACH intend to monitor selected outcome measures and indicators of success where stratified data are available over time to identify any emerging disparities or potential unintended consequences of interventions and implementation activities?

Note when reviewing data and measures to identify potential disparities and inequities, there are many ways to approach reducing or eliminating disparities and not all stakeholders or communities will be in agreement as to the best approach.

- ☑ Some ACHs may choose to focus on "raising all boats"—ensuring improvement for the entire community, regardless of any disparities between groups within the community. This approach can sometimes lead to increased inequities if the group that experiences more burden does not receive needed resources. A risk is that this approach can be seen as more equal but is not equitable in practice.

- ☑ Other ACHs may choose to focus on improvement toward a benchmark for a specific group. This can include comparing a group to an overall benchmark (e.g., statewide or county wide performance on a measure) or to a specific benchmark (e.g., improve the rate for this group by 10%).

  Risks inherent in this approach can lead to assuming groups that have already met or surpassed the overall benchmark no longer need resources, or that using a specific benchmark for a group ensures they never catch up to the overall community. Setting specific benchmarks for groups can also be controversial, as holding different groups to different standards again raises concerns about equitable practices and can surface prejudiced assumptions people may have about the group (e.g., "if they never take their kids to a doctor, we can't expect them to improve their rate of well child visits.").

- ☑ A third approach focuses on reducing the gap between a specific group experiencing inequities and a reference population (either the highest performing group or another standard). While comparing to the highest performing group can help set a high standard and demonstrate what might be possible in the community, this comparison must be carefully done if the highest performing group has had access to resources and supports that other groups have not. Similarly, a common reference population is non-Hispanic whites, which may not be appropriate for all communities.

Measuring Health Equity

The Prevention Institute has developed a set of recommended health equity metrics that reflect the determinants of health, including structural drivers like inequitable distribution of power, community determinants, like social norms and the built environment, and healthcare.[12]

Table 7: Recommended Equity Metrics

Structural Drivers	Community Determinants			HealthCare Services
	Social-cultural environment	Physical/Built environment	Economic environment	
• Neighborhood disinvestment index • Life expectancy by zip code	• Collective efficacy • Civic engagement	• Housing index • Alcohol outlet density	• Local wealth • Workplace safety	• Percent of patients who can access a place they call their "medical care home" within 2 weeks

These metrics may not sufficiently address underlying systemic barriers or unjust practices. Additional measures of interest may include things like access to food, access to different types of medical facilities, access to green space, and power dynamics between groups and organizations. ACHs should select specific barriers that relate to their particular issue or condition of interest.

- ☑ Has your ACH explored or adopted any specific equity-related outcome measures? *For example, improved access to medical facilities.*

- ☑ Has your ACH explored or adopted any specific equity-related indicators of success? *For example, number of partners who attended an equity training, or number of Spanish-speaking certified community health workers, or number of organizational partners who have made a shift in their policies to create systemic changes.*

- ☑ Has your ACH explored or adopted any outcome measures or indicators related to drivers of inequities? *For example, reduction in poverty level or policy changes related to drivers of inequities that your community has identified.*

[12] Measuring What Works to Achieve Health Equity: Metrics for the Determinants of Health. Prevention Institute. June 2015. https://www.preventioninstitute.org/sites/default/files/publications/Measuring%20What%20Works%20to%20Achieve%20Health%20Equity%20_Full_Report.pdf

- ☑ Review your selected equity-related measures: how many of them focus on systemic outcomes or outcomes related to inequities versus disparities? *See definitions section above.*

- ☑ Has your ACH ensured that any equity-related outcome measures or indicators of success that you have selected are also feasible to measure? See *Measures* section above.

Stratifying Data to Identify Disparities

Common approaches to measuring health disparities focus on looking at differences between populations. Some organizations may focus on differences between groups (geographic, racial, ethnic, etc.) within healthcare or public health sectors, while others may include social determinants of health in their equity-related work. Identifying differences between groups is the first step, but ACHs should be careful to not let this be the only step.

After disparities have been identified, ACH communities must ask why that difference exists. There may not be sufficient ways to measure all dimensions of health equity at this time, however, bringing an equity lens and criteria are important to embed equity practices throughout the process.

Stratifying Measures
There are many ways to stratify selected measures to look at differences between groups. Stratifications may include age, gender, race, ethnicity, language, sexual orientation, socioeconomic status, insurance status, geography, etc.

It is important to look at intersections across the data and not just one stratification at a time. *For example, which intersections of race, age, and sexual orientation are improving the most from the ACH's efforts?* Only stratifying measures by certain demographic factors can potentially lead to misclassification and stereotyping. *For example, if data are only stratified by race and language, it may be tempting to treat the characteristic as the answer to why the difference exists.* Stratifying measures by other demographic factors is highly encouraged.

Note that for many measures at the county- or sub-county level, stratification may only be possible if multiple years of data are combined, which may affect your ability to report in a timely manner. See sections above on data lag and measure availability.

- ☑ For each of the selected outcome measures and indicators of success, has your ACH identified what stratifications might be possible, given available data? *You can use a version of the simple chart below to help map your measures.*

Table 8: Available Stratifications, by Measure

Measure	Age	Insurance	Race	Ethnicity	Language	Zip
County diabetes prevalence	*x*		*x*	*x*	*x*	
# of trained providers		*N/A*			*x*	*x*

- ☑ Are you able to disaggregate (separate out) any of your data further to consider within-group differences, as well as between-group differences? *For example, only looking at the broad race categories (e.g., Asian) may mask differences between populations within the category (e.g., Chinese, Vietnamese, Indian).*

- ☑ For selected outcome measures and indicators of success where stratified or disaggregated data are available, has your ACH reviewed the results for any potential disparities or areas for improvement?

Resources on Health Equity

Measuring What Works to Achieve Health Equity: Metrics for the Determinants of Health
This guide from the Prevention Institute outlines the connections between determinants of health, related behaviors and exposures, and medical conditions. The guide also includes recommended health equity metrics. Prevention Institute. June 2015.
www.preventioninstitute.org/sites/default/files/publications/Measuring%20What%20Works%20to%20Achieve%20Health%20Equity%20_Full_Report.pdf

What Is Health Equity? And What Difference Does a Definition Make?
This Robert Wood Johnson Foundation report is intended to stimulate discussion and promote greater consensus about the meaning of health equity and the implications for action.
www.rwjf.org/en/library/research/2017/05/what-is-health-equity-.html

Health Equity Guide
This online toolbox provides strategic practices and key actions local health departments can take to advance equity. It also includes case studies and a large resource library, including a section on mobilizing data for health equity. **www.healthequityguide.org**

In Pursuit of Health Equity: Defining Stratifiers for Measuring Health Inequity
This report from the Canadian Institute for Health Information provides recommended definitions for a selection of equity stratifiers for measuring health inequalities: age, sex, gender, income, education, and geography. **www.cihi.ca/en/health-inequalities**

Health Equity Roadmap
The National Qualify Forum issued a roadmap for healthcare providers, payers, and others to take action to eliminate healthcare disparities using quality measures and related policy levers. **www.qualityforum.org/NQFs_Roadmap_to_Health_Equity.aspx**. Or, this 2018 *Health Affairs* summary: **www.healthaffairs.org/doi/10.1377/hlthaff.2017.1301**

The Health Opportunity and Equity (HOPE) Initiative
This Robert Wood Johnson Foundation initiative tracks 28 indicators that span the life course and reflect systems and policies that affect health equity. Data is tracked at the state and national level, and compared to benchmarks. **www.nationalcollaborative.org/our-programs/hope-initiative-project**

COMMUNICATING PROGRESS

This section includes questions and considerations for milestones related to reporting and data storytelling.

> "ACHs should position themselves as public initiatives and take regular steps to highlight progress, accomplishments and the contributions of partners."
>
> **Accountable Communities for Health: Strategies for Financial Sustainability**
> JSI, May 2015

ACHs Have Multiple Reporting Needs

ACHs need to communicate data for multiple purposes, including raising visibility of the ACH's overarching vision and Portfolio of Interventions with community stakeholders, providing transparent information about activities and progress, creating collective accountability across partners, and demonstrating the ACH's value to potential funders and investors (using data as part of a broader initiative that is associated with an ask, including more funding, the implementation of a program, etc).

In addition to communicating with community stakeholders, ACHs also need to monitor the progress of their POI and implementation activities. This may include providing progress reports for leadership, reporting out to certain stakeholder groups with accountability and oversight for the work, or supporting continuous quality improvement efforts among internal staff and partners. Data on ACH activities and outcomes can also be used to help inform or persuade in the policymaking process.

ACHs should explore potential audiences and communication needs to determine what reports or reporting products are needed. It is unlikely that a single data visualization project or single dashboard will meet all audiences' needs, given that the "ask" or "action" for each audience will likely be different. ACHs may need internal-facing reports or data products that are separate from any public-facing reports or dashboards.

It may also be feasible to build a high-level report that is useful for a lay audience and include links to more nuanced data for key constituents interested in underlying details.

While ACHs should tailor reports or data products for specific audiences, ACHs should also ensure that all groups are getting what they need out of the data and that communities are not being left out of this process.

- ☑ Consider your selected outcome measures and indicators of success: Who are the audience(s) for each? What level of detail does each audience need? How would they want these data presented?

- ☑ Consider what your ACH leadership and workgroups/committees will need to know about your Portfolio of Interventions and implementation activities. When will information be most helpful to them? How and when can you provide or "package" information in formats so that it is actionable? *For example, should you focus on digital displays (like LiveStories or Infogram) or a printed summary that could be brought to individual meetings with stakeholders?*

- ☑ Consider how your ACH can incorporate qualitative data to provide more context. How and when can stories, interviews, narratives, and photos be incorporated? How can this be added to data products or reports to make them more meaningful?

- ☑ What other audiences does your ACH need to share information with, or even persuade? What about other types of information beyond outcome measures? *For example, ACH operations or financial reporting may be relevant for leadership groups.*

Which Measures to Report

After considering audiences in more detail, ACHs may find that not all of the initially selected outcome measures and indicators of success have an audience or will be actionable for monitoring progress and communicating results. ACHs may refine the selected measures, removing and adding new measures as needed, or perhaps focus on a particular set of data points for one audience and another set for a second purpose.

An ACH may decide to keep all of the selected measures but have no plans to publicly report some of them immediately, or may keep some of the selected measures as potential backup measures, if additional information is requested, or if a slightly different question comes up that could be answered with a different measure or data source. Some measures may not be fully comparable (i.e., variation in partner reporting or data availability), and an ACH may choose not to report a given measure or indicator publicly but continue to use the data internally to identify potential barriers and areas for improvement.

ACHs may find natural divides between the selected outcomes of interest and indicators of success that inform report content. *For example, a public-facing dashboard may only include outcome measures that can be updated once a year and reflect the overall health of the community, whereas an internal monitoring report may include the indicators of success based on quarterly partner data sharing.*

Your ACH may find that a split—i.e., a public-facing report that covers the overall CACHI impact paired with an internal-facing dashboard to monitor implementation—is most appropriate, or that only a public-facing report is needed, or even another combination.

- ☑ Consider what data product(s) will meet your identified reporting and communication needs.

Leveraging Existing Reports

ACHs may wish to continue to leverage existing reporting (i.e. County public health surveillance, broader initiative dashboards, reports to other funders, etc.) to minimize duplication or avoid brand/initiative confusion with stakeholders. In these scenarios, ACHs should consider comparing their selected measures against existing reports:

- ☑ Are all your selected outcome measures and indicators of success available in existing reports or dashboards already?

- ☑ If all measures *are* available (which may be the case if an ACH used 'measure availability' as a key measure selection criterion), but across a variety of reports, how will your ACH bring this information together for staff and stakeholders?

- ☑ If all measures are not available in existing reports, how will your ACH fill the gap? Are there any outcome measures or indicators of success that your ACH has selected that will not be reported at all?

Note that while ACHs may be more narrowly focused on one or two specific communication needs that will incorporate specific data points, or selected measures (i.e., developing a fact sheet, program brochure, or meeting materials), or on selected content for their data storytelling project, these activities should not be taken as substitutions for an overall dashboard or suite of reports that gives an overall picture of the ACH's progress and impacts.

DATA SHARING

This section briefly touches on milestones related to data sharing.

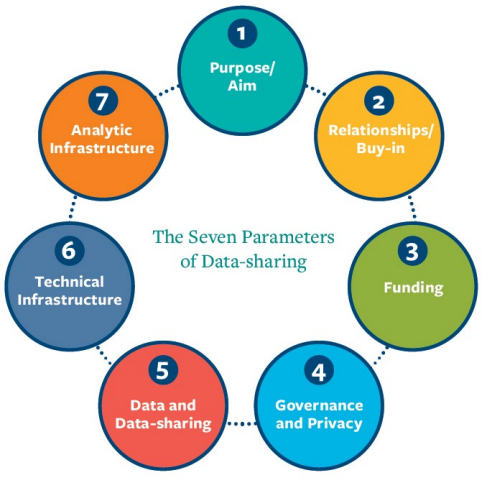
> "Data sharing, particularly at the local level, is an essential component to identify community-wide needs, inform ACH activities, and monitor the impact of population-based health efforts. Collecting, aggregating, and sharing health, social services, and financial data from disparate clinical and non-clinical services and programs, as well as community and population-level data, across a variety of providers and organizations is thus an important goal for ACHs."
>
> **Advancing State Innovation Model Goals through Accountable Communities of Health**
> **Center for Health Care Strategies**
> Oct 2016

To be able to report on selected outcome measures and indicators of success, as well as enable certain interventions (particularly related to referrals, community-clinical linkages, and care coordination), ACHs may need to pursue data sharing arrangements with data owners or aggregators. This may range from entering into data sharing agreements with clinical partners who will report aggregate HEDIS measure results, to building infrastructure and agreements to support real-time, individual-level data sharing.

The Center for Healthcare Organizational & Innovation Research (CHOIR) at UC Berkeley was engaged by the California Health and Human Service Agency to develop a data sharing toolkit to specifically support CACHI sites. This toolkit provides ACH collaboratives with detailed steps and processes required to engage in cross-sector data sharing across a continuum of data sharing maturity (from beginning to advanced): **choir.berkeley.edu/ach-toolkit**

Resources

All In: Data for Community Health Network
All In is a learning network of communities across the country that are testing new ways to systematically improve community health outcomes through multi-sector partnerships to share data. The Network offers a variety of technical assistance, including reports, toolkits, webinars, subject matter experts, and an online portal for additional discussion and peer learning. **www.allindata.org**



From CHOIR's ACH Data-Sharing Toolkit

Appendix 1: ACH Data-Related Milestones

This section excerpts the CACHI 5 Year Milestones that relate to data and measurement considerations.

2a. The ACH adopts and incorporates *equity, diversity and inclusion* principles throughout the activities of the ACH.	
Year 2	• The ACH explicitly incorporates equity-based criteria for developing outcomes and indicators (e.g., targets are tied to racial/SES outcomes), portfolio interventions, data strategy, and Wellness Fund priorities.
Year 4	• The ACH identifies data sources and methods that can identify potential health disparities and a narrative that demonstrates how its activities advance equity.
Year 5	• The ACH incorporates equity considerations as a key criteria for measuring success in terms of its own operations as well as the implementation of the portfolio of interventions. • The ACH demonstrates specific ways in which it is operating more equitably and inclusively (e.g., diverse resident engagement on the leadership team and involvement with interventions, more equitable distribution of resources, greater attention to communities and populations with health disparities, implementing interventions to specifically address health inequities, etc).

2b. The ACH *engages residents and the community-at-large* in the governance of the ACH, as well as the design and implementation of interventions	
Year 3	• Residents and representative CBOs are trained and understand how to use data and narratives produced by the ACH to spread the word about the ACH's accomplishments.

Year 4	• The ACH demonstrates accountability to the community, and community champions understand and support the goals of the ACH.

3a. Interventions are *aligned* across the five domains to achieve a set of prioritized outcomes that address varying stages of the selected issue and include short- to long-term timeframes, upstream and downstream factors, and measures for monitoring success.	
Year 1	• The ACH utilizes the Community Health Needs Assessments and other community inputs to determine a priority health issue or community condition and in considering an initial portfolio. • The ACH collectively develops an understanding of the root causes of the health issue or community condition, including any relevant policies or systems barriers that have led to racial, ethnic, or gender inequities associated with the issue or condition. • The ACH inventories interventions that are already underway that address the health issue and are operating throughout the geographic area.
Year 2	• The ACH utilizes the Community Health Needs Assessments and other community inputs to determine a priority health issue or community condition and in considering an initial portfolio. • The ACH develops a preliminary portfolio of interventions that includes all five domains and a mix of upstream and downstream (prevention and treatment) activities. Potential new interventions in the community-clinical linkages domain may be identified along with needed systems changes. • The ACH identifies a select number of common and measurable outcomes for the portfolio and their respective indicators of success, as well as the relationship between the interventions and the outcomes (note that multiple interventions should lead to such outcomes). (Because some outcomes may

	take years to manifest, short- or medium-term process or interim outcomes may also be identified.)[13] • The ACH identifies gaps in interventions, based upon ensuring a breadth of activities across the five domains, evidence, dose, reach, cost, near-/intermediate-/long-term benefits, etc., and potential strategies for addressing them. • The ACH creates an implementation plan for interventions across all five domains.
Year 3	• The ACH aligns interventions in all five domains toward a common set of outcomes. • The ACH develops a plan to focus on gaps in the portfolio that prioritizes interventions that 1) address gaps with regard to composition and reach, 2) are prevention oriented, and 3) advance health equity. (Plans to address gaps may take the form of capacity expansion to meet community needs within an existing intervention, new interventions identified as high priority to achieve the outcomes, or longer-term prevention or environmental change (upstream) interventions not yet addressed.) • The ACH establishes a practice to annually monitor implementation of the plan.
Year 4	• The ACH incorporates a quality improvement approach to improve interventions. • The ACH reviews the portfolio of interventions to assess the degree to which interventions are mutually reinforcing and aligned toward a common set of outcomes.

[13] An outcome measure reflects the impact of an intervention on the health status of patients or a population (e.g., mortality rates, the percentage of children with diabetes in a given geography). A process measure is a step to prevent, maintain, or improve health that generally follows recommendations for practice (e.g., the percentage of people with diabetes who had their blood sugar tested and controlled). Indicators could represent different populations (e.g., children and adolescents), time frames (1-2 years, 5 years), etc.

	• Upon reviewing the progress of the implementation plan, the ACH refines the Portfolio as needed, with particular attention to long-term prevention-oriented aspects of the portfolio.
Year 5	• The ACH reviews the portfolio of interventions for progress toward advancing a common set of outcomes and refines the portfolio as needed, with particular attention to overall balance of short-term and long-term, breadth and depth, upstream and downstream.

4a. The ACH has adopted and is implementing a *sustainability* approach/plan that articulates its value, quantifies its needs, and identifies specific funding sources.	
Year 2	• The ACH begins development of a sustainability plan, starting with a statement of benefit and value, e.g., a value proposition. The value proposition should identify both financial and non-financial benefits of an ACH.
Year 4	• The ACH captures and reports financial and non-financial value through both quantitative data and narrative, related to Years One and Two activities to stakeholders.

5a. The ACH identifies, collects, and/or synthesizes, and reports *data* to monitor and communicate through a dashboard progress regarding ACH assets and infrastructure (e.g., Wellness Fund), outcomes (e.g., selected health condition), and overall impact.	
Year 1	• The ACH inventories available data sources related to the priority health issue or condition.

Year 2	• The ACH identifies outcome measures and indicators of success that reflect its priority health issue, or condition, and Portfolio of Interventions. • The ACH determines how it will monitor progress on all selected outcome measures and indicators of success, including identifying data sources, frequency of data availability, whether data sharing agreements are needed, etc. • The ACH identifies indicators for which data are unavailable, but desired, and plans for how data can be collected.
Year 3	• The ACH operationalizes all selected outcome measures and indicators of success and begins regularly reporting on the measures. • The ACH determines its audiences for internal and public facing reporting and identifies which outcome measures and indicators of success should be reported to which audience, with what frequency, and through what format.
Year 4	• The ACH expands its regular reporting to include any outcome measures or indicators of success not reported previously. • The ACH identifies needed infrastructure, analytical capacity, and processes for routine data reporting to support quality improvement and monitoring needs, including any necessary staff development, technology acquisitions, or funding.
Year 5	• The ACH has the infrastructure, analytical capacity, and processes in place for routine data reporting to support the quality improvement and monitoring needs of ACH activities, including the Portfolio of Interventions and Wellness Fund investments.

5b. The ACH implements communication strategies, using data and accessible, visual mechanisms, to "tell its story."	
Year 1	• N/A
Year 2	• The ACH develops a preliminary narrative and overall communications approach to explain the ACH to partners, potential partners and other key audiences, including, ultimately, the community.
Year 3	• The ACH adopts a narrative template to tell the story of its value to multiple audiences, including the community, using data visuals and narrative story. • The ACH finalizes a communication plan that identifies selected audiences, key messages, interventions, and activities to highlight, and communications medium(s) that it will implement. • The ACH begins implementing components of its communications plan, including prioritizing audiences, developing key materials (e.g., presentations, webpages, etc.), and conducting outreach.
Year 4	• The ACH continues to implement its communication plan. • The ACH uses data visualization approaches, including dashboards, where appropriate, to increase transparency and communicate accountability to partners, investors, and the community.
Year 5	• The ACH refines its communications strategy to incorporate storytelling, data visualization approaches, and audience-specific messages to convey progress on indicators and documenting systems changes.

Appendix 2: Social Determinants of Health

The social determinants of health are conditions in the environment in which people are born, live, learn, work, play, worship, and age that affect a wide range of health, functioning, and quality of life outcomes and risks. In addition to social, economic, and physical settings ("place"), the patterns of social engagement, and the sense of security and well-being, are also affected by where people live. Understanding the relationship between how people experience place and the impact of place on health is fundamental to social and physical determinants of health. [14]

Social Determinants	Physical Determinants
• Availability of resources to meet daily needs (safe housing, food markets) • Access to educational, economic, and job opportunities • Access to healthcare services • Quality of education and job training • Availability of community-based resources in support of community living and opportunities for recreational and leisure-time activities • Transportation options • Public safety • Social support • Social norms and attitudes (e.g., discrimination, racism, distrust of government) • Exposure to crime, violence, and social disorder (e.g., trash in a community) • Socioeconomic conditions (e.g., concentrated poverty and the stressful conditions that accompany it) • Residential segregation • Language/literacy • Access to mass media and technologies (e.g. cell phones, internet, social media) • Culture	• Natural environment such as green space or weather • Built environment, such as buildings, sidewalks, bike lanes, and roads • Worksites, schools, and recreational settings • Housing and community design • Exposure to toxic substances and other physical hazards • Physical barriers, especially for people with disabilities • Aesthetic elements (e.g., good lighting, trees, and benches)

[14] Healthy People 2020, Office of Disease Prevention and Health Promotion https://www.healthypeople.gov/2020/topics-objectives/topic/social-determinants-of-health

Appendix 3: CACHI Logic Model