

The background of the entire page is a purple-tinted photograph of two women in business attire. One woman, wearing a grey blazer and a light-colored scarf, is leaning over a table, looking at a document. The other woman, wearing a dark blazer and a patterned scarf, is sitting at the table, smiling and looking towards the first woman. The overall tone is professional and collaborative.

# COMMUNITY STATUS ASSESSMENT

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Quantitative Assessment  
Tool for Mobilizing for Action  
through Planning and  
Partnerships (MAPP) 2.0

**MAPP 2.0**

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# LIST OF ACRONYMS

**ADT** = Assessment Design Team

**CHA** = Community Health [Needs] Assessment

**CHIP** = Community Health Improvement Plan

**CSA** = Community Status Assessment

**MAPP** = Mobilizing for Action through Planning and Partnerships



# OVERVIEW OF THE COMMUNITY STATUS ASSESSMENT (CSA)

## Purpose

Led by the Mobilizing for Action through Planning and Partnerships (MAPP) Assessment Design Team (ADT), the CSA informs MAPP and collects quantitative data on the status of your community such as demographics, health status, and health inequities. The CSA helps a community move “upstream” and identify inequities beyond health behaviors and outcomes, including their association with social determinants of health and systems of power, privilege, and oppression. The CSA is a community-driven assessment to help tell the community’s story.



## Opportunity to Move Upstream

Whether you are doing the CSA for the first time, or your community has done one before, the CSA is an opportunity to study **upstream** factors impacting your community that may have not been explored before. Communities can use data from prior community health [needs] assessments (CHA) to inform the structure of the CSA. Wherever your community fits, the CSA can help you identify the root causes of inequities that impact your community.



## Community Engagement in the CSA

As emphasized throughout MAPP, you must engage the community to be successful. The data within the CSA should reflect your community's unique characteristics and members. You will build new or strengthen existing connections within your community throughout the CSA, including connections with historically marginalized and minoritized members of the community.

By including community members in the process, including organizations that work with historically marginalized communities and people experiencing inequities, you help ensure the data reflect all voices. Engage the community in the CSA, including to collect and analyze data and interpret results. The CSA can help you explore the demographics, dynamics, and hierarchies of power within your community related to race, class, gender, and other demographics. Including the community can also help identify the neighborhoods and groups to engage within your CSA. Use the CSA to reflect on past community-engagement efforts and how you can improve community engagement.

Additionally, consider culture and context. How do members of your community prefer to be engaged? How can engagement remain culturally inclusive and relevant? *Refer to Phase I to learn more about community engagement.*

## Guiding Questions

The CSA helps you address the goals and purpose of MAPP and answer the following questions:

- *What does the status of your community look like, including health, socioeconomic, environmental, and quality-of-life outcomes?*
- *What populations experience inequities across health, socioeconomic, environmental, and quality-of-life outcomes?*
- *How do systems influence outcomes?*



# GETTING STARTED

## Supplemental Tools

Many steps of the CSA have additional templates, worksheets, resources and tools to help you address the purpose and guiding questions. They are listed at the beginning of each step.

The file, “**CSA Additional Tools and Resources**” is available in the MAPP 2.0 Tools folder at [naccho.org/mapp](http://naccho.org/mapp), and includes external sources that can be referenced throughout the CSA.

## Considerations Before Beginning

Before you begin, determine your capacity for completing the process and think about the following:

- **Reflect on organizational capacity, readiness, and resources to lead the CSA.** What are the technology needs of the CSA? Do you have the capacity to collect and hold large amounts of sensitive data? Does the CSA team need training to manage data? Reflect on *Phase II: Design the Assessment Implementation Process* and how to use resources to support the CSA. Also, refer to your *Workplan and Budget* to consider team members’ roles and responsibilities, activities that communities can do, and resources/funding needed. Use the “**CSA Budget Worksheet**” (app. A) to estimate potential costs of this assessment.
- **Engage your community throughout the CSA.** Plan to involve your community throughout the CSA. Refer to Phase I for more information on community engagement to inform MAPP.
- **Reflect on your organization’s efforts** to understand and address inequities and identify opportunities to explore the root causes of inequities.
- **Consider the power structure** within your community and the larger region and revisit and align throughout the CSA process.

### CSA Tools

The CSA has tools to guide you step-by-step in using quantitative data to understand the status of your community. The tools align with reliable quantitative data-collection methods.

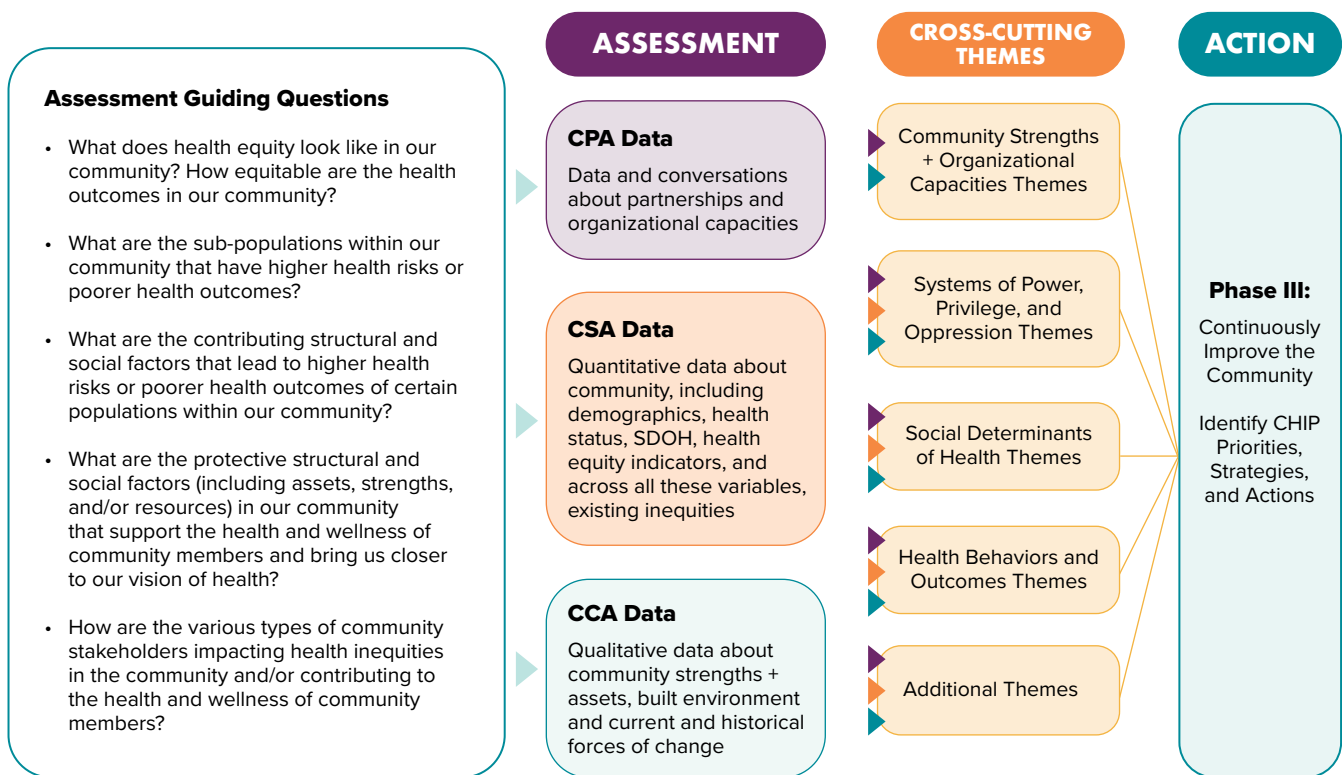
All tools will help inform the CSA; however, some are *optional* resources to inform the process.

You may adapt tools to fit your community. Depending on your experience, you may choose to use quantitative tools familiar to your community, subject matter experts, etc.

# How to Use Community Status Assessment Findings

Figure 1 outlines the relationship among the three MAPP assessment tools: Community Partner Assessment (CPA), CSA, and Community Context Assessment (CCA). Together, these assessments identify key CHI themes. As you do the CSA, think about how data may relate to one or more of the four cross-cutting themes.

**FIGURE 1. Translation of Assessments to Action through Cross-Cutting Themes**



Approach seeks to:

- Center lived experience/expertise of communities experiencing inequities produced by systems
- Focus on assets and strengths rather than deficits
- Name power and historical/structural context and how that shapes experiences of privilege and oppression
- Improve functioning, impact and outcomes of systems and services provided

# STEP ONE: ENGAGE ADT AND STAKEHOLDERS



In step one of Phase II, you formed the ADT and determined the lead(s) for the CSA and members' roles in designing, doing, and evaluating the CSA.

To do the CSA as designed and support a community-driven process, engage people with diverse views, skills, and experiences. Consider what strengths these people can offer to inform the CSA. This step may require you to add stakeholders or refresh the ones included in a prior CHA, such as the following:

- MAPP Core Group
- MAPP Steering Committee
- MAPP partners (e.g., critical community organizations, local public health system, partners who advocate on behalf of community members impacted by public health issues). These partners may have access to data or populations experiencing inequities
- Community members, including representation from BIPOC (Black, Indigenous, and people of color); LGBTQIA+ (lesbian, gay, bisexual, transgender, queer, and other gender-affirming identities); and immigrant, refugee, and migrant communities
- Elected officials and local decision-makers
- Community champions, including people who advocate on behalf of their community and empower people to get involved in health activities and data collection

## *Subject Matter Experts*

To support comprehensive and quality data collection, identify and engage subject matter experts skilled with primary (e.g., surveys) and secondary quantitative data-collection methods.



## STEP TWO: DETERMINE THE PURPOSE OF THE CSA



### Be Clear about the Purpose of the CSA

The CSA contributes to the larger community story told through the three MAPP assessments. It will help you explore data about populations experiencing **inequities** and describe complex issues that impact your community.

Before you start, revisit and reflect on the purpose of the CSA to your community. Understanding your community's unique purpose for the CSA will help you engage the community and gather the right data to tell your community's story.

#### Explore the following questions:

- Why do we need these data?
- How will the data be used to advance community health and shared goals?

### Identify Questions that will Guide Your CSA and Inform the Purpose of the CSA

The CSA will help you answer the following questions:

- What does the status of your community look like, including health, socioeconomic, environmental, and quality-of-life outcomes?
- What populations are experiencing inequities across health, socioeconomic, environmental, and quality-of-life outcomes?
- How do systems influence outcomes?

These questions should influence all parts of the CSA, including selecting indicators, collecting data, analysis, and reporting. Identify other questions to explore based on your community's unique characteristics, context, and interests. For example, you could add a question on a specific issue impacting your community.

If you did a previous CHA, review issues or priorities that emerged to inform the CSA and consider other questions this process should help answer. Consider framing your questions to explore the **root causes** that contribute to existing inequities.



# STEP THREE: ASSESS THE VALUE OF EXISTING COMMUNITY DATA



## Supplemental Tools

- **Assess the Value of Data Worksheet** (app. B)
- **Framework to Assess Existing Data** (Optional)

## Assess Existing Data to Inform the CSA

Using existing data can enhance the scope of the CSA to understand the status of your community and reduce duplicated efforts. Collaborate with your organizational partners and stakeholders to identify any existing data about “your community” (as you defined it in Phase I) that helps you answer the guiding questions for the CSA.

Many **local public health system** partners collect quantitative data you can use. Refer to the *Stakeholder Characteristics Table* from Phase I to find people to support the CSA, including their role and resources. The quality of existing data may vary, so evaluate each potential source. Explore opportunities to collaborate and share data among partners. When you can, explore public health data first.

Here are some potential sources of data:

- Local or state government agencies, such as social services or public health departments. Allow time to request data from local, state, or Tribal health departments or systems, as needed
- Federal government agencies, such as the U.S. Census Bureau, Centers for Disease Control and Prevention, and National Institutes of Health
- Area non-profit hospitals, Federally Qualified Health Centers, social service agencies, or other agencies who do a CHA and community health improvement plan (CHIP) to support their community-based work
- Police records
- School districts
- Policy and legislative scans
- Research by area universities

### Adaptations

You might face challenges throughout the CSA with accessing data to shape your community profile. These include Tribal area, zip code, city, and county.

Where needed, adapt the CSA to your community, including identifying and collecting available data to explore the purpose of the CSA and guiding questions.

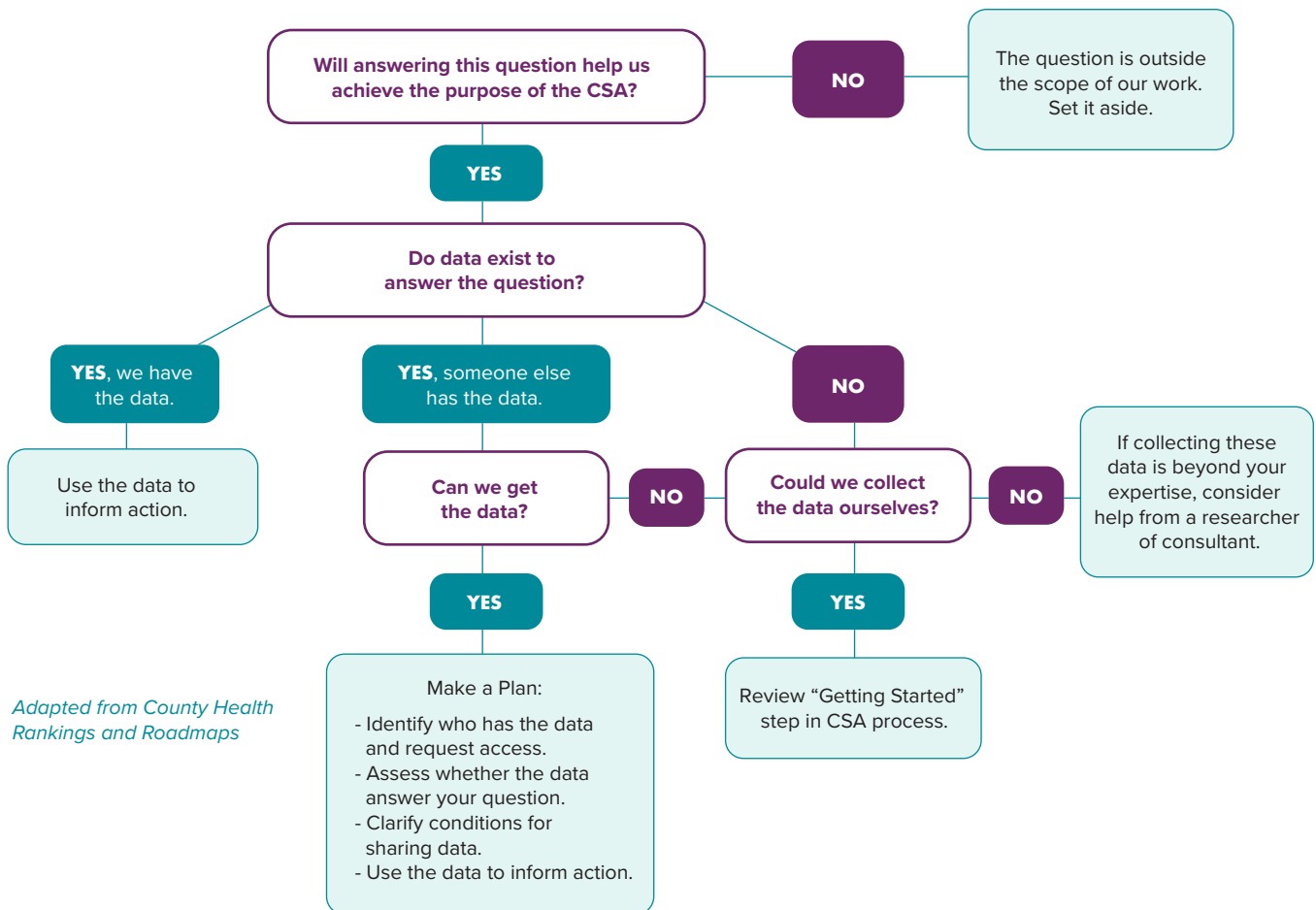
For example, when data are not available for a rural or Tribal community, consider using county-level data to help understand the community status.

**Use the following views to help evaluate the collection of existing data sources:**

- Do the data represent the status of the entire community as you have defined it?
- Do the data include the local public and Tribal health system (e.g., school, economic development, transportation, law enforcement, mental health, physical health)? Data should reflect all sectors in the local public health system to support a full understanding of issues that impact your community.
- Have the data been used strategically to inform improvements?
- Do the data show how different populations are impacted by social determinants of health, disparities, and inequities?
- Do the data reflect systems of privilege, power, and oppression that impact your community?
- What population(s) in your community or the local public health system are missing?
- What is the quality of the data (e.g., reliability, validity, accuracy)?

Use the **“Assess the Value of Data Worksheet”** to help evaluate existing data and if you need more data. The following “Framework to Assess Existing Data” can also help.

**FRAMEWORK TO ASSESS EXISTING DATA**



*Adapted from County Health Rankings and Roadmaps*

## STEP FOUR: IDENTIFY INDICATORS TO INFORM THE CSA



### Supplemental Tools

- **CSA Indicator Matrix** (app. C)
- **Indicator Criteria Matrix** (app. D)

### Steps and Recommendations to Select Preliminary Indicators

The ADT and other stakeholders should explore and identify indicators for the CSA. Indicators are measures that describe community conditions (e.g., poverty rate, insecure housing rate, food insecurity, life expectancy at birth, heart disease mortality rate) now and over time.

Indicators help to answer the question: *How are we doing on community conditions we care about?* They can also help tell a story about your community across levels of influence: individual, family, organizational, community, policy, and systems. To tell the full story across these different levels, aim to include indicators of the following:

- Health status, behaviors, and outcomes
- Social determinants of health
- Systems of power, privilege, and oppression

Systems-level indicators (e.g., systems of power, privilege, and oppression) are important to identify to help you understand the status of your community and the root causes of inequities in your community. The root causes of inequities are shaped by institutional and societal structures, policies, and norms. Identifying and measuring indicators at the systems level provides information and data to help communities target strategies to advance equity. For example, measuring residential segregation in your community provides a data point to help understand racial differences in socioeconomic mobility and structural racism that shape and reinforce structural inequalities.<sup>1</sup>

#### ***Systems of Power, Privilege, and Oppression***

While the CSA alone will not reveal systems of power, privilege, and oppression, collecting and understanding systems-level data can help you identify the root causes of inequities within your community. It can also shape understanding of health status, behaviors, outcomes, and social determinants of health.

Refer to Phase II for more information about the connection among health status, behaviors, and outcomes; social determinants of health; and systems of power, privilege, and oppression.



Follow these steps to select appropriate indicators for your community:<sup>2,3</sup>

- 1. Reflect on the purpose of the CSA and the questions you want to answer about the status of your community.** Refer to the interests of your community and people involved in the process.
- 2. Determine your goals by using specific indicators.** Consider what themes, issues, or goals are important to measure to understand the current and future status of your community. Consider what you would like to know about health behaviors and outcomes, the social determinants of health, and systems of privilege, power, and oppression. *If your community has already done a CSA, review the current indicators being tracked and determine if they are still relevant.*
- 3. Determine what data you need to meet your goals.** Reflect on issues impacting your community now and what data would help describe them.
- 4. Identify indicators that reflect the data you want and can be measured.** Review the CSA Indicator Matrix and select indicators relevant to your CSA goals. *(Indicators in the matrix were selected based on criteria relevant to the purpose of MAPP and CSA process, as well as evidence-based practice criteria to be considered in the selection of quality indicators.)* The indicators are organized into three categories: health status, behaviors, and outcomes; social determinants of health; and systems of power, privilege, and oppression. You may also use indicators that are not listed in the matrix but evaluate them closely (see step 5) to ensure the measures and data are appropriate and reflect the unique characteristics of your community.
- 5. Prioritize indicators.** Every indicator you select for the CSA should meet the criteria in the Indicator Criteria Matrix. Use the tool to review potential indicators and determine if they meet the criteria. Ideally, every indicator should satisfy all criteria included in the tool. However, you might need to use some that do not meet all the criteria until better measures and data are available. Too many indicators can become confusing and make it difficult to collect and analyze data.

<sup>1</sup>County Health Rankings. (2022). [www.countyhealthrankings.org](http://www.countyhealthrankings.org)

<sup>2</sup>The Community Tool Box. (2022). <https://ctb.ku.edu/en>

<sup>3</sup>Institute of Medicine (U.S.) Committee on Using Performance Monitoring to Improve Community Health. (1997). Measurement tools for a community health improvement process. In Durch, J.S., Bailey, L.A., Stoto, M.A. (Editors), *Improving health in the community: a role for performance monitoring*. Washington, DC: National Academies Press (U.S.). Available from [www.ncbi.nlm.nih.gov/books/NBK233011/](http://www.ncbi.nlm.nih.gov/books/NBK233011/)



To use the Indicator Criteria Matrix, place an “X” in the box of any criterion an indicator meets. Review results and use only the indicators that meet the most criteria. Consider any gaps in the data or if any existing data do not meet the criteria. You might need to collect new data to fill those gaps. Your community may also choose to adapt this tool to fit criteria relevant to its needs and availability of data. Consider the **Criteria for Selection of High-Performing Indicators** to select your criteria for indicators.

You might need to narrow down your list of indicators even more. These are additional resources and examples to prioritize them:

- Explore the **NACCHO Guide to Prioritization Techniques** to help select indicators specific to your community, such as the Hanlon Method and Prioritization Matrix.
- Use **Sample Prioritization Tool A** to weight your existing criteria and score the indicators, available in the MAPP 2.0 Tools folder at [naccho.org/mapp](http://naccho.org/mapp).
- Use **Sample Prioritization Tool B** to categorize your criteria and score indicators across the categories, available in the MAPP 2.0 Tools folder at [naccho.org/mapp](http://naccho.org/mapp). You can use the criteria in the example, or fill in your own.

Your final indicators should satisfy specific criteria, reflect questions the CSA wants to answer, and align with your community’s unique characteristics.

### *Considerations*

- Be intentional. Revisit the purpose of the CSA and make sure the indicators align with your goals. Select indicators that describe conditions in your community.
- Consider indicators that reflect unusual links that can highlight important information and uncover root causes (e.g., increase in cancer incidence and exposure to environmental risk factors, such as pesticides and toxic chemical air pollution).
- Select indicators that reflect strategic considerations of the value of individual indicators and of the collection of indicators for a specific issue. Carefully compile indicators that will help you understand the status of your community.
- Use indicators that capture social determinants of health and community outcomes beyond the individual level. For example, prioritize indicators of housing, access to food and transportation, preschool enrollment, and high school graduation rates.
- Consider the availability and level (Census tract, zip code, city, county, Tribal, state) of data for the indicators. Data might not be available at some levels, so use the most local, neighborhood data available for the CSA. For Tribal communities, this may be Tribal area or county data. For rural areas, this may be county or city data. In urban areas, the most local data may be at the Census tract or zip code levels.

# STEP FIVE: COLLECT DATA



## Supplemental Tools

- **Secondary Data Source List**, available from the MAPP 2.0 Tools folder at [naccho.org/mapp](https://naccho.org/mapp)
- **Quantitative Data-Collection Methods** (app. E) (*Recommended, but optional*)
- **Compendium of State-Level Secondary Data Resources**, available from the MAPP 2.0 Tools folder at [naccho.org/mapp](https://naccho.org/mapp)

## Collecting Data from Existing Sources

Now that you have identified indicators, collect data to help understand the status of your community and track changes over time. You can collect data from existing sources. Refer to the Secondary Data Source List for a list of sources of data on health behaviors and outcomes, social determinants of health, and systems of privilege, power, and oppression. This list does not include all sources, so you might need to do research to identify other appropriate sources. If you need more data to understand the status of your community, decide what methods would help you tell your community's story.



## U.S. Census Bureau Data

The U.S. Census Bureau is a source of secondary data for various indicators outlined in the CSA, including the American Community Survey. Not sure where to start? Access various resources (e.g., courses, videos, webinars, tutorials) to help you learn how to access and use Census Bureau data:

- **Census Academy**
- **American Community Survey Tutorials**



## Considerations for Rural and Tribal Communities

Some secondary data (e.g., U.S. Census, BRFSS) may be limited or unavailable for rural and Tribal areas. In that case, partnering with local clinics, hospitals, schools, and organizations may help you find local data.

When data are not available, refer to the Quantitative Data-Collection Methods tool for ideas and examples of collecting data with considerations for different levels of capacity.

## Determine Methods for Collecting Data to Inform the CSA

Data collection takes time and resources. Consider the local capacity and resources to collect, analyze, and interpret data and information. You can use various methods depending on the type of data needed. Consider getting help from local experts and assistants.

Two broad types of data are primary and secondary. **Primary data** involves collecting new data. For example, you might collect new data through a community-wide survey to uncover new information about health status and perceptions of important issues. **Secondary data** involves identifying and reusing existing data. For example, you might identify, request, and use data from a previous or ongoing surveillance or project.

By this step, you will know what data are available. You should collect primary (new) data only if secondary (existing) data are unavailable and your community can collect the new data.

Gather publicly available data first and allow time to request data from local, state, or Tribal health departments or systems, as needed. If existing data have gaps, you will need to collect **primary data** through a community survey or other method. For example, do you need more data to do the following:

- Address the needs of a population experiencing inequities?
- Understand community needs and resources to guide policy change?
- Assess the impact(s) of specific issues?

Data collection does not have to be perfect. However, you should note the limitations of existing data and ways to improve collection in the future. Additionally, you should discuss who will own and manage data when collecting any new data, including how you might share the data with the community, stakeholders, and other relevant partners.



### **Here are some resources for collecting primary and secondary data:**

- **Quantitative Data-Collection Methods** (app. F): Examples of collecting data by type (e.g., survey, analyzing existing data) and levels of capacity (e.g., convenience, representative samples)
- **Compendium of State-Level Secondary Data Resources\***: Sources to collect or request publicly available data
- **Secondary Data Source List\***: Sources of publicly available data on health behaviors and outcomes, social determinants of health, and systems of privilege, power, and oppression
- **CSA Additional Tools and Resources\***: Examples of community surveys that use validated questions from national surveys (e.g., Behavioral Risk Factor Surveillance System, National Health and Nutrition Examination Survey)
- **PRAPARE** (Protocol for Responding to and Assessing Patients' Assets, Risks, and Experiences): Tools and resources used by community health centers and health systems across the nation

*\* Available from the MAPP 2.0 tools folder at [naccho.org/mapp](http://naccho.org/mapp)*

## Considerations

- Engage community champions to help promote your community survey and create trust among partners.
- Offer incentives to increase participation in a community survey. If funding agencies restrict the use of grant funds to purchase incentives for community-engagement activities and data collection, check if local partners might offer incentives (e.g., donations, sponsors).
- Plan for how to represent diverse populations in both primary and secondary data collection.
- Seek approval and follow community/cultural protocols before collecting data. This is especially important in Tribal communities.
- Use or adapt community surveys that have been refined over time and validated for reliability and validity. Validated surveys have been tested with multiple groups to ensure respondents interpret questions as they are intended. This will ensure you collect useful, accurate data.
- Engage your community in data-collection methods. Your community is a vital partner to inform the CSA and data collection. Examples include working with community members as data collectors and engaging community-based partners that work with community members to organize and facilitate data collection. Refer to the *Stakeholder Characteristics Table* from Phase I.
- Engage local, regional, or Tribal colleges/universities in designing and administering surveys. This might be an affordable option because many faculty and staff have expertise in collecting data. It may also be a learning experience for students.
- Document and refine the process of data collection. Monitoring and tracking data over time will make future CSAs easier. Reflect on the goals, objectives, measures, and outcomes identified at the beginning of the CSA. Refer to **Monitor and Evaluate** in the CSA.

## Community and Cultural Contexts

Engage diverse community members throughout the data-collection process to deepen understanding of community and cultural contexts and help identify any issues related to language, culture, identity, and more.

Through this process, ask community champions about the best or preferred ways to collect data in the community. For example, local gatherings may be a good place to reach community members in Tribal communities, and you may need special approval before collecting data.

In urban areas, grocery stores and community centers may be good places to engage immigrant and refugee populations.



# STEP SIX: DEVELOP AND APPLY DATA-COLLECTION PLAN



## Supplemental Tool

- **Data-Collection Plan Template** (app. F)

## Develop Data-Collection Plan

Now that you have identified methods, develop a plan to collect, analyze, and report data. Use the Data-Collection Plan to determine how you will appropriately collect other useful data. Make a **data-collection plan** before collecting and analyzing data for the CSA, in collaboration with individuals/stakeholders identified to inform the CSA.

As you develop your plan, consider the interests and needs of your community and how to ensure equitable, inclusive data collection that accounts for **intersectionality** (including race and ethnicity, disability, LGBTQIA+, nationality, gender, etc.). Developing a plan from this view helps to design the CSA through a health equity lens.

- **Select What to Measure:** Focus on the purpose and questions you are trying to answer specific to the CSA.
- **Identify the Indicator:** Decide what indicator will demonstrate action and progress on outcomes.
- **Data-Collection Method(s)/Sources:** Identify the specific method(s)/sources to collect current or historical data, including primary (e.g., survey, observation) and secondary data.
- **Data-Collection Instrument(s):** Decide what type of instrument you will use, such as an online survey or paper survey.
- **Sample:** Identify the people/population you will invite to participate. Be specific about their demographics and characteristics, such as rural or medically underserved.
- **Data Collection:** Indicate when, where, and how you will collect data. Consider how to support access for populations experiencing inequities in your community, including cultural considerations. For example, if using an electronic survey, consider how to reach populations without Internet access through a local library, community group, or other outlet. Whatever your process, recognize one size does not fit all.
- **Duration:** Identify how long you will collect data for (e.g., weeks, months). Allow more time if necessary to account for challenges with recruitment and participation.
- **Timeline:** Identify when you will collect data throughout the CSA.



- **Person(s) Responsible:** Identify who will be responsible for data collection. Consider how you will involve community members to help.
- **Data Analysis:** Identify how you will analyze data to address the CSA questions. *(Refer to the following section on data analysis.)*

## Apply Your Data-Collection Plan

Now that you have decided on data-collection methods and indicators, apply the CSA as outlined in your data-collection plan. Review and revise the plan as needed. Learn from the data you collect in the CSA and adjust as needed to ensure you collect useful data to inform the purpose and guiding questions of the CSA.

### Spotlight on Successful Data Collection



#### Using a Community-Centered Approach

A Tribal community in the Great Plains offers an example of a community-centered approach to data collection in a rural, reservation-based context.

Tribal health administrators worked with an external institute to collect data on adoption programs in the Tribal community. They traveled to communities within the reservation and talked to birth mothers who had placed children for adoption.

Before each visit, they promoted the project and shared when they would be there through flyers, radio, and local newspapers. They centered local voices by working with a student who lived on the reservation and helped interview birth mothers. They brought a meal to the community during visits. This respectful strategy led to successful data collection.

#### Using Secondary Data to Highlight Disparities

In partnership with a local university, a health department in the southern United States engaged in work related to breast/chest feeding guided by the principles of Community-Based Participatory Action Research. This approach centers the voices of prioritized populations in identifying and solving the health problems affecting their communities. Local public health data from the Pregnancy Risk Assessment Monitoring System and Women, Infants, and Children program showed disparities in breast/chest feeding initiation and duration among women of color. Using this secondary public health data, the program explored these disparities and potential facilitators and barriers to breast/chest feeding through qualitative data collection.

## Considerations

- Engage community members in data collection to support your data-collection plan.
- Meet community members where they are to inform data collection, such as through events or a trusted organization. This helps build trust and engage hard-to-reach populations.
- Consider cultural differences to ensure equitable, inclusive data collection. Engage stakeholders and community members who represent or are members of specific populations to help understand cultural differences and best practices to support data collection.
- Partner with local universities/faculty in public health to support data collection.
- Collaborate with area non-profit hospitals, Federally Qualified Health Centers, social service agencies, or other agencies that do a CHA and CHIP. Coordinate on data-collection efforts to expand the reach and reduce duplication of effort in your community.
- Identify missing opportunities to share data with partner agencies, access existing data, and reduce duplication of effort.



# STEP SEVEN: ORGANIZE, ANALYZE, AND INTERPRET DATA



## Organize Data

You now need to organize the data collected from the CSA. Compile and organize data using a data management/monitoring system (e.g., Microsoft Excel, Tableau). This system will make it easier to analyze all data collected during the CSA and monitor and evaluate community status data over time. When possible, collect and organize local (zip code, city, Tribe, community), state, and regional data to compare the scope of impact of issues.

Here are some elements to consider when developing a data-monitoring system:

- Frequency of data collection
- Quality of data
- Comparisons to state, regional, Tribal, national, and peer data
- Ability to modify or add indicators
- Methods for maintaining the data system
- Data ownership and stewardship

If you have collected paper documents (e.g., survey, observation forms), keep original documents for later reference. Back up any electronic data. Carefully store sensitive data, such as personal information, and consider who has access. Review and “clean” the data to identify incomplete or inconsistent information that may skew your analysis. Work with the ADT and stakeholders with data expertise to support data organization, analysis, and interpretation.

## Analyze Data

Methods to analyze CSA data can be simple or complex depending on the type of data collected and indicators identified. Your data-collection plan will support this step. Initial analysis will help you identify patterns and unexpected results to inform the CSA.

While organizing data, note the format. Is it in count (or the number of total cases), percent, or rate? Is it the incidence or prevalence? Is the data **aggregated** (i.e., data for distinct groups/populations are combined)? Is the data **disaggregated** (i.e., data for distinct groups/populations are not combined and available for comparison)? Note these details in the data-management system. Most CSAs provide **descriptive** (e.g., statistics that describe characteristics of a population/sample) data on indicators, which is simply a count or percent.

### Considerations

- The **Cottage Health Evaluation Toolkit** can help you understand how to analyze and interpret data.
- The **Dabbling in the Data: A Hands-On Guide to Participatory Data Analysis** can help you collaborate with communities on data analysis and visualization.
- Comparing the CSA data to state and national data can help you identify priority issues and inform data triangulation.

## Using a Health Equity Lens

Community, neighborhood, history, and social context are important when analyzing and framing data, especially when comparing outcomes across groups. Consider exploring data not only by race/ethnicity but also by immigration status. Disaggregate data to understand any differences or inequities across groups. For example, when analyzing data and sharing rates of type 2 diabetes by race/ethnicity/immigration status, consider contextual data on your community, physical and social environment, and resources across the same groups such as poverty status, zip code, access to healthy food, and educational attainment.

In this example, the community and social context are highlighted as important risk factors rather than race/ethnicity/immigration status, which are tied to inequities. Advanced analytical methods are available to examine relationships or associations between indicators and other variables of interest (e.g., neighborhood, race/ethnicity, and age).

For more information on using a health equity lens when analyzing data, consider **Framing Data to Advance Equity** by the Office of Health Equity in the Colorado Department of Public Health and Environment and **Applying a Health Equity Lens to Analyze Performance Data and Inform Continuous Quality Improvement Work** developed for the Health Resources and Services Administration.



## Interpret Results

Engage community members, stakeholders, and local partners to interpret results. Ask the following:

- Are the results clear and easy to read?
- Do the results align with the goals of the CSA?
- Do the results answer the questions the CSA was intended to answer?
- What data are missing? Who should be involved to fill those gaps and how?
- Are results disaggregated across groups and populations? Can you examine how different populations or groups compare across indicators?

As you summarize and interpret results, reflect on data that address the questions guiding the CSA identified in Step 2 and align with the following categories:

- Health status, behaviors, and outcomes
- Social determinants of health
- Systems of power, privilege, and oppression

This alignment will help you prepare for a future MAPP step that involves engaging community members, partners, and stakeholders to identify cross-cutting themes and understand your community through **data triangulation**. Through this engagement process, the group will collectively interpret findings and cross-cutting themes to develop issue statements that reflect issues faced by your community.

As you reflect on the CSA data to inform data triangulation, also assess the quality and reliability of data sources used to inform the CSA results. This will help you understand variance in results. High-quality, reliable data are a high priority. Also consider the significance of the CSA data concerning the data collected from other MAPP assessments (e.g., Community Context Assessment, Community Partner Assessment) to inform data triangulation.

## STEP EIGHT: COMPILE RESULTS



### Recommendations on How to Present Data

As you finish data analysis, answer a few questions before you compile results and share them with your community and stakeholders:

- Who is going to use the data?
- How are the data going to be used?

These questions may have multiple answers. For example, your community can use the data to inform current and future programming. At the same time, organizational stakeholders can use the data to grow their public health infrastructure. Consider multiple ways to explain the results and tailor the data to your audience.

When you compile data to share with your community, consider the following:

- How familiar is the community with statistical analysis?
- What is their previous experience with the CSA?
- What is their understanding of data-collection methods?

Also consider differences in power and culture within the community. For instance, plan for who will share the data and how.

### Data Visualization

Good data visualization empowers your community to use the data to address their needs. Data visualization helps to present large amounts of data by putting information in a format audiences can understand (e.g., tables or charts). When done properly, data visualization will allow all audiences to view the data and gain at least a basic understanding with little explanation from practitioners.

You might feel overwhelmed by all the data and find it hard to know which pieces are important to share. Think about the outcomes of your data visualization or dashboard before you begin designing it.

First, consider whom the data are for and how the data will be used. Resist the urge to create a dashboard for everyone who will ever look at the data. Instead, consider who will *most* need to see and use the data. For instance, what will community members be most interested in seeing? How does that differ from organizational and fiscal stakeholder interests? How can you display data so they will understand? What barriers might they face in understanding and interpreting data? How can you remove those barriers?

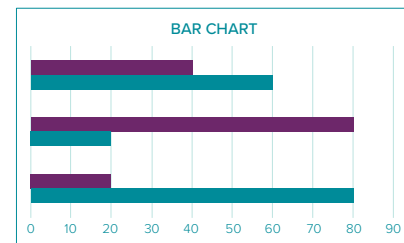


## Guidelines for Working with Common Types of Data Visualization

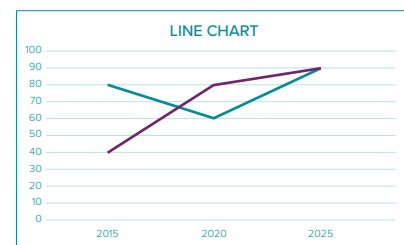
**Tables** list records and consist of rows (each row is one record) and columns (each column is a field). Tables can show a lot of information in a structured way but may overwhelm users who are just looking for high-level trends or are not used to interpreting data.

Year	Rural	Urban
2015	255	600
2017	300	750
2020	350	725

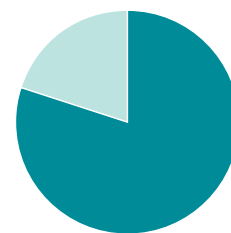
**Bar charts** are used to compare quantities of different categories. They work well when comparing different demographic categories of the same variable/question.



**Line charts** track changes or trends over time and show the relationship between two or more variables.



**Pie charts** and donut charts, a pie chart with a hole in the center, are used to compare parts of a whole and should be used carefully.



Provide context for any assumptions or recommendations drawn from the data. Providing context creates trust between those who share the data and the wider community. Context allows communities to make informed decisions about programming and next steps. For example, a positive correlation (or relationship) between obesity rates and the number of fast-food restaurants may seem like a simple relationship to explain, but it does not acknowledge issues of food deserts, food insecurity, and city walkability.

Data visualization can help the community draw conclusions from the data. The use of color, arrows, text, and other visual cues can help viewers see and interpret information. The simpler you make the visualizations, the more your audience will take away. Do not pack too much into a single visualization. Instead, clearly and concisely convey the most important message from a set of data.

### *Considerations*

- Refer to resources and recommendations from experts on data visualization, such as **Stephanie Evergreen Data Viz Checklist** and **BetterEvaluation**.
- Focus on the questions guiding the CSA when considering which pieces of data to highlight.



# STEP NINE: SHARE RESULTS WITH YOUR COMMUNITY



Now that you have taken steps to understand the status of your community, share results from the CSA with your community and participants from the assessment. Ideally, your community engagement throughout the CSA will pay off in the wide reporting of results with community members. While the CSA results are part of MAPP, consider ways to share results from the CSA alone and with the overall MAPP assessment results.

You can share CSA findings with your community in **various ways**. Consider **source, message, audience, and channel**:<sup>4</sup>

- **Source:** Identify different ways to share the CSA findings that connect with your community members and stakeholders. Methods may include community presentations, press releases, and written reports to provide multiple access points to your findings.
- **Message:** Determine the CSA results you want to share. What information should your community know?
- **Audience:** Know the characteristics of your community. For example, you might need to reach members of your community who are English language learners through community meetings and an interpreter. Consider developing a distribution plan to help determine how and with whom to share the results.
- **Channel:** Share CSA results through various channels to reach community members. For example, you might reach local policymakers through radio or newspapers, while social media platforms might be better to reach youth.

Connect with community members to determine the best way to share findings with specific community groups, including considerations for language, literacy, and engagement. Allow your community to guide the process and include them in any planning. Doing so will increase participation in any community meetings and result in richer conversation and, therefore, the use of the data.

## Considerations

- Engage youth or community ambassadors to help share findings/stories from the CSA.
- Engage community champions to help share results with your community.
- Ask for ideas from community partners and stakeholders about how they want to receive results.
- Consider ways to share results to reach community residents without Internet access or with language barriers or low literacy levels.
- Refer to the Yale CARE **Beyond Scientific Publication: Strategies for Disseminating Research Findings**.
- Refer to **Making Data Talk: A Workbook from the National Cancer Institute** for a guide on how to communicate CSA data to your community.

<sup>4</sup> Brownson, R.C., Eyer, A.A., Harris, J.K., Moore, J.B., & Tabak, R.G. (2018). Getting the word out: New approaches for disseminating public health science. *Journal of Public Health Management and Practice*, 24(2), 102–111. <https://doi.org/10.1097/PHH.0000000000000673>

# STEP TEN: MONITOR AND EVALUATE



## Supplemental Tool

- **Continuous Quality Improvement Tool** (app. G)

## Monitor and Evaluate the CSA to Inform MAPP

Monitoring the CSA data-collection system ensures a smooth, inclusive MAPP process. Review the process immediately after completing MAPP and host ongoing conversations among organizational and community stakeholders to ensure the process continues to run smoothly.

Ideally, you will identify a subcommittee of stakeholders to inform all facets of data collection and reporting. Frequently ask how your community is changing and who needs to be involved to ensure the design and implementation of the CSA accurately reflect your community.

The **Framework for Evaluation in Public Health** by the Centers for Disease Control and Prevention is a general evaluation tool to help you understand your data and create an evaluation process that is embedded within the CSA.

The CQI Tool guides you through the Continuous Quality Improvement process and provides resources to help you identify how to include quality improvement in the CSA process. Generally, a proper evaluation includes the following steps:



- **Identify:** Either annually or biannually, review your CSA process. Can you improve any part? Are there more voices to include? Can you change the data collection or data sharing?
- **Plan:** Create a plan for any change. Who will facilitate the change? What is the timeline for the change? Make the change on a small scale and check for needed shifts.
- **Execute:** Make the change on a larger scale. Engage stakeholders and community members in the process.
- **Review:** Use data to analyze the results of the change and determine whether it made a difference in the overall project or data collection.

### Considerations

- Engaging community members in the evaluation helps to ensure that data accurately represent the people being served.
- An effective evaluation plan should consider available resources for the plan including time from committee members for oversight and collection of data.
- A recurring process (at least every two years) is helpful when considering which data should be used to determine outcomes within the population. Regularly revisit chosen indicators and processes for gathering and reporting on data.

## STEP ELEVEN: REFLECT ON THE CSA



When your CSA is done, reflect on the process and findings and summarize challenges and opportunities that emerged. The summary helps to identify a list of issues that will be compared to results from the other MAPP assessments. In creating a list of challenges and opportunities, the ADT and individuals/stakeholders should examine the CSA findings and ask the following:

- How are you actively exploring systems of privilege, power, and oppression? Where could you have explored data at a systems level to understand root causes?
- How do the CSA findings reflect issues that affect large numbers of people or significantly impact a small number of people, have serious consequences, or show evidence of wide inequity between populations?
- How should the issues identified in the CSA be addressed through programs, policies, or practices?
- How do the CSA findings highlight local data that reflect assets/gaps in your community?

# APPENDIX

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# A. CSA Budget Worksheet

This worksheet outlines potential costs of completing the Community Status Assessment (CSA). The budget for the CSA will vary based on the unique characteristics and circumstances of the community. Common costs within five categories (Personnel, Contractual, Equipment & Supplies, Travel, and Other) are presented below, along with questions for consideration.

## Personnel

Many people will be involved in the implementation of the CSA, including the Assessment Design Team, subject matter experts (SMEs), stakeholders, and additional community participants, and they should be compensated.

Consider the following:

- What staff are already available to support the CSA process, and what roles will they fulfill?
  - Facilitating the CSA process (e.g., organizing meetings, developing surveys, data collection and analysis, developing the CSA report, communicating with stakeholders, community engagement)?
  - Providing subject matter expertise (e.g., epidemiology, translation, survey design, data collection and analysis)
- What additional staff are needed?
- Will new staff for the CSA be hired full-time or part-time?
- Will you hire community champions to assist with community engagement, data collection, and promotion/dissemination of the CSA?

PERSONNEL					
Expense (a)	FTE Salary (b)	% Time (c)	=	Total Costs (d)	Source (e)
<i>Example: Epidemiologist</i>	\$75,000	30%	=	\$21,000	<i>Local health department (in-kind)</i>
			=		
			=		
			=		
			=		
			=		
			=		
<b>Total Personnel</b>			=		

## Contractual

Contractual costs may take the form of either consultant agreements or contracts with other organizations to carry out specific components of the CSA (e.g., prepare, design, conduct, and analyze a community survey; conduct observations, collect secondary data, or data visualization). *Consider the following:*

- What necessary activities are your project staff not able to complete (e.g., primary/secondary quantitative data collection)?
- Could those tasks be carried out by a consultant or another agency?
- Are there certain partners who can carry out a component of the project (e.g., those who have access to community members who can be champions or support CSA tasks)?
- Is a consultant needed for a single task (such as data collection) or to provide project management for an entire process?
- How will the consultant be paid (e.g., hourly, by project component, flat fee)? *Note that a contract based on project component/total project cost reduces the risk of paying a consultant for more hours than anticipated*
- Will incentives or compensation be provided to partner organizations, stakeholders, or other community participants facilitating the CSA?

CONTRACTS							
Contractor (a)	Service Scope (b)	Service Unit (c)	Total Units (d)	Unit Cost (e)	=	Total Costs (f)	Source (g)
<i>Example: John Doe</i>	<i>Analyze survey data</i>	<i>Hour</i>	<i>30</i>	<i>\$75</i>	=	<i>\$1,875</i>	<i>United Way</i>
					=		
					=		
					=		
					=		
					=		
					=		
					=		
					=		
<b>Total Contract</b>					=		

## Equipment & Supplies

Additional equipment and supplies may be needed to conduct the CSA. Consider the following:

- Will you facilitate in-person or virtual planning meetings, and what materials are needed (e.g., flipcharts, binders, markers, sticky notes, name badges, food)?
- Will you need to rent meeting space? *To estimate cost, consider the number of meetings to be held, the room size needed, and the length of each meeting*
- What types of data collection methods will be used, and what are the associated costs?
  - Paper survey (printing, postage)
  - Online survey (fees for platforms such as Survey Monkey or Qualtrics)
  - Electronic in-person (tablet or smartphone)
- What equipment are needed to create interim reports and the final CSA report (e.g., computers)?
- What will be the printing costs (e.g., for meeting materials or reports)?

EQUIPMENT & SUPPLIES					
Expense (a)	Quantity (b)	Per Unit Cost (c)	=	Total Costs (d)	Source (e)
<i>Example: Meeting materials printing</i>	<i>300 pages</i>	<i>\$0.65</i>	=	<i>\$195</i>	<i>Local foundation</i>
			=		
			=		
			=		
			=		
			=		
			=		
			=		
			=		
			=		
<b>Total Equipment &amp; Supplies</b>			=		

## Travel

Travel may be required to support implementation of the CSA, including for staff, partners, and/or community participants. *Consider the following:*

- Travel by staff and partners to disseminate a community survey
- Travel by community participants to and from planning meetings, including parking, public transportation, or mileage reimbursement

TRAVEL					
Trip (a)	Cost (b)	# of trips (c)	=	Trip Cost (d)	Source (e)
<i>Example: Drive to survey site</i>	<i>5 miles @ \$0.55/mile</i>	<i>6</i>	=	<i>\$16.50</i>	<i>Local health department</i>
			=		
			=		
			=		
			=		
			=		
			=		
			=		
			=		
			=		
			=		
			=		
			=		
<b>Total Travel</b>			=		

## Other Costs

If you anticipate other costs of the CSA process, identify whether they will be supported through in-kind contributions or if they will require new sources of funding. *Consider the following:*

- Funds may be needed to reimburse some partners and community participants for travel to and from the planning meetings, including parking, public transportation, or mileage reimbursement.
- Gift cards or other compensation for survey participants.
- Food for community events.

OTHER COSTS					
Expense (a)	Quantity (b)	Per Unit Cost (c)	=	Total Cost (d)	Source (e)
			=		
			=		
			=		
			=		
			=		
			=		
			=		
			=		
			=		
			=		
			=		
			=		
<b>Total Other</b>			=		

## B. Assess the Value of Data Worksheet

*(See table on following page)*

1. List the problem or issue to address through data.
2. Identify the view the data provide: community, financial, state/nation, etc.
3. List the source document and date for the data to determine their timeliness to support the CSA (e.g., within the past five years).
4. List the population(s) the data reflect (e.g., people living below the Federal Poverty Threshold, people of color, people who are medically underserved).
5. Identify which public health system sector the data reflect.
6. Determine the person(s)/entity responsible for accessing the data.
7. Select low, medium, or high to indicate how relevant the data and information are to developing the CSA.



# Assess the Value of Data Worksheet

Problem/Issues being Addressed	Data Perspective (e.g., community, health department, state, national)	Source(s) of Data/Date		Data reflect specific population(s) in the community	Data reflect public health system sectors (e.g., school, worksite)	Person(s)/ Stakeholder Responsible	Relevance to purpose of CSA		
		Source	Date				Low	Med	High

## C. CSA Indicator Matrix

The CSA Indicator Matrix outlines a range of relevant indicators to help understand the status of your community focused on social determinants of health, health status, behaviors, outcomes, systems of power, privilege, and oppression. The indicators are based on criteria relevant to MAPP, the CSA, and evidence-based practice.

Here are some criteria used to select indicators:

- Stratified by geography, including state, county, census tract, and, where applicable, neighborhood and Tribal area.
- Available—Data are available at a single point in time and over time.
- Stable and timely data (within the past five years).
- Ability to use data across settings—The ability to collect comparable, consistent data across sites (e.g., county, state).
- Public Health Burden—Relative significance to health and well-being of the community.
- Trend data available for the past five years.
- Reflect intent to address equity in community/ jurisdiction—Metrics that capture root causes, social determinants of health, or both.
- Data Quality—Adequate sample size and valid measure.
- Stratified by demographics, including race/ ethnicity, age, sex, and income.
- Align with goals for MAPP and the CSA guiding principles.

Use the matrix to help explore new and existing indicators that align with the goal(s) of the CSA for your community, including issues impacting the community. Use the **Indicator Criteria Matrix (app. D)** or **Sample Prioritization Tools A and B** to help determine which indicators are most relevant to help you understand the status of your community, including factors and root causes that contribute to inequities. Access Sample Prioritization Tools A & B from the MAPP 2.0 Tools folder at [naccho.org/mapp](https://naccho.org/mapp).

**Note:** Throughout the CSA, you may have challenges accessing data to shape your community profile, including Tribal area, zip code, city, or county. Some datasets may only be available for or applicable to larger areas. For example, you might need to collect data at the county level to explore indicators relative to a Tribal area. Where needed, adapt the CSA to your community, including identifying and collecting available data to explore the purpose of the CSA and guiding questions.



## HEALTH STATUS, BEHAVIORS, AND OUTCOMES

Category	Indicator	Measure	Source	Geographic Availability
Health Status	Life Expectancy	Average number of years a person can expect to live by zip code	Neighborhood Life Expectancy Project	Census Tract
	Unhealthy Mental Health Days	The proportion who reported 14 or more days of poor mental health, which includes stress, depression, and problems with emotions, during the past 30 days	CDC – National Center for Chronic Disease and Health Promotion	County
	Self-Reported Fair/Poor Health	The proportion who reported either “Fair” or “Poor” health	CDC – National Center for Chronic Disease and Health Promotion	County
	Unhealthy Physical Days	The proportion who reported 14 or more days of poor physical health, which includes physical illness and injury, during the last 30 days	CDC – National Center for Chronic Disease and Health Promotion	County
Disease/Injury	Heart Disease Prevalence	Percentage of adults who have ever been diagnosed with coronary heart disease	CDC – Interactive Atlas of Heart Disease and Stroke	County
	Diabetes Prevalence	Percentage of adults aged 20 and older with diagnosed diabetes	CDC – U.S. Diabetes Surveillance System	County
	Low Birthweight	Percentage of live births with low birthweight (<2,500 grams)	National Center for Health Statistics – CDC Wonder	City, County
	Cancer Incidence	Age-adjusted rate of new cancer cases	National Cancer Institute – State Cancer Profiles	County
	Obesity Prevalence	Age-adjusted prevalence of obesity among adults aged 18 years and older	CDC – National Center for Chronic Disease and Health Promotion	County
	STD Infection Rate	Number of newly diagnosed chlamydia cases per 100,000 population	CDC – AtlasPlus	County
	HIV Infection Rate	Number of people aged 13 years and older living with a diagnosis of human immunodeficiency virus (HIV) infection per 100,000 population	CDC – AtlasPlus	County
	Nonfatal Injury	Number of motor vehicle crash deaths per 100,000 population	Fatality Analysis Reporting System	County
	Covid Local Risk Index	Neighborhood-level COVID risk index, reflecting social and economic factors and health outcomes relative to other neighborhoods on the City Health DASHBOARD	City Health DASHBOARD	Census Tract Maps for select cities across the United States

Category	Indicator	Measure	Source	Geographic Availability
<b>Health Behaviors</b>	Smoking and Tobacco Use	Percentage of aged ≥18 years who report having smoked ≥100 cigarettes in their lifetime and currently smoke every day or some days	CDC – National Center for Chronic Disease and Health Promotion	County
	Physical Inactivity	Percentage of adults aged 20 and over reporting no leisure-time physical activity	CDC – National Center for Chronic Disease and Health Promotion	County
	Mammography	Age-adjusted prevalence of mammography use among women aged 50–74 years	CDC – National Center for Chronic Disease and Health Promotion	County
	Colorectal Cancer Screening	Age-adjusted prevalence of colorectal cancer screening among adults aged 50–75 years	CDC – National Center for Chronic Disease and Health Promotion	County
	Alcohol Use	Adults aged ≥18 years who report having five or more drinks (men) or four or more drinks (women) on an occasion in the past 30 days	CDC – National Center for Chronic Disease and Health Promotion	County
	Oral Health: Dental Visits	Prevalence of dental visit among adults aged 18 years and older	CDC – National Center for Chronic Disease and Health Promotion	County
	Teen Births	Birth rates among females aged 15–19 years	CDC – National Center for Health Statistics	County
	Vaping Use (Youth, grades 9–12)	Percent of youth grades 9–12 who ever used electronic vapor products (including e-cigarettes, vapes, vape pens, e-cigars, e-hookahs, hookah pens, and mods)	CDC – Youth Risk Behavior Surveillance System	State
	Nutrition - Fruit/Vegetable Consumption	Percent of adults who report consuming fruit less than one time daily	CDC – National Center for Chronic Disease and Health Promotion	State
	Nutrition - Fruit/Vegetable Consumption	Percent of adults who report consuming vegetables less than one time daily	CDC – National Center for Chronic Disease and Health Promotion	State
<b>Mortality</b>	Infant Mortality Rate	Number of infant deaths per 1,000 live births in the specified population	National Vital Statistics System – CDC WONDER	County
	Heart Disease Mortality Rate	Age-adjusted number of deaths from heart disease per 100,000 people	CDC – Interactive Atlas of Heart Disease and Stroke	County
	Suicide Mortality Rate	Number of deaths due to suicide per 100,000 population	CDC – WISQARS Fatal Injury Data	County
	Drug Overdose Deaths	Number of drug poisoning deaths per 100,000 population	CDC – WISQARS Fatal Injury Data	County
	Maternal Mortality Rate	Number of maternal deaths per 100,000 live births	National Vital Statistics System	County
	COVID Mortality Rate	Number of deaths due to COVID-19 per 100,000 population	CDC – COVID Data Tracker	County

<b>Mortality (cont'd)</b>	All-Cancer Mortality Rate	Age-adjusted mortality rate from all cancer per 100,000 people	National Cancer Institute – State Cancer Profiles	County
	Unintentional Injury Mortality Rate	Age-adjusted death rates from unintentional injury (accidents) per 100,000 people	CDC – WISQARS Fatal Injury Data	County
	Motor Vehicle Mortality Rate	Number of motor vehicle crash deaths per 100,000 population	National Vital Statistics System	County

### SOCIAL DETERMINANTS OF HEALTH

Category	Indicator	Measure	Source	Geographic Availability	
<b>Neighborhood and Built Environment</b>	Housing Cost Burden	30% or more of household income spent on housing costs	ACS 5-Year Estimates	Census Tract	
	Housing Insecurity	Percentage of households with at least one of four housing problems: overcrowding, high housing costs, lack of kitchen facilities, or lack of plumbing facilities	ACS 5-Year Estimates	Census Tract	
	Limited Access to Healthy Foods	Population who are low-income and do not live near a grocery store	Department of Agriculture	County	
	Broadband Access	Percentage of households with broadband Internet connection	ACS 5-Year Estimates	Census Tract	
	Walkability Index	Relative walkability by Census Block Group	National Walkability Index	Census Block Group	
	Air Quality	Average daily density of fine particulate matter in micrograms per cubic meter (PM 2.5)	Environmental Dataset Gateway	City	
	Drinking Water Violations	Presence of health-related drinking water violations	Safe Drinking Water Information System	County	
	Access to a Park	Percentage of population living within a half mile of a park	National Environmental Public Health Tracking Network	County	
	Commuting Patterns to Work		Means of transportation to work	ACS 5-Year Estimates	Census Tract, Tribal Area
			Mean travel time to work	ACS 5-Year Estimates	Census Tract, Tribal Area
	Superfund Sites	Proportion of a neighborhood located within .62 miles of a Superfund site that was active in 2014	Environmental Protection Agency	Zip Code	
Food Environment Index	Index of factors that contribute to a healthy food environment, from 0 (worst) to 10 (best)	County Health Rankings	County		
<b>Economic Stability</b>	Poverty	Total number of people in poverty	Small Area Income and Poverty Estimates	Census Tract, Tribal Area	
	Children in Poverty	Percentage of all people under 18 years of age at or below the Federal Poverty Level	Small Area Income and Poverty Estimates	Census Tract, Tribal Area	
	Living Wage	Hourly rate that an individual household must earn to support individual and their family	Living Wage Calculator	City, Metro Area	

Category	Indicator	Measure	Source	Geographic Availability
<b>Economic Stability (cont'd)</b>	Unemployment	Annual average unemployment rate of civilian non-institutionalized population	Local Area Unemployment Statistics	County, MSA
	Median Household Income	Income where half of households earn more and half of households earn less	ACS 5-Year Estimates	Census Tract, Tribal Area
	Food Insecurity	Percentage of households experiencing food insecurity	Feeding America	County
	Income Inequality	Ratio of household income at the 80th percentile to income at the 20th percentile	ACS 5-Year Estimates	Census Tract
	Median Value of Owner-Occupied Homes	Median value for owner-occupied housing units with a mortgage	ACS 5-Year Estimates	Census Tract
	Homelessness	Individuals and families experiencing homelessness at a point in time	U.S. Interagency Council on Homelessness	State
<b>Social and Community Context</b>	Social Vulnerability	Social Vulnerability Score (social vulnerability of communities, at census tract level, within a specified county)	CDC/ATSDR Social Vulnerability Index	County
	Violent Crime	Number of reported violent crime offenses per 100,000 population	Uniform Crime Reporting	MSA, Law Enforcement Agencies
	Voter Participation	Percentage of persons 18 years or older registered/eligible to vote	ACS 5-Year Estimates	Census Tract
	Social Associations	Number of membership associations per 10,000 population	U.S. Census Bureau County Business Patterns	County
	Multigenerational Households	Family households with three or more generations	ACS 5-Year Estimates	Census Tract, Tribal Area
<b>Healthcare Access and Quality</b>	Access to Care: Primary Care Providers	Ratio of population to primary care providers	Health Resources and Service Administration	County
	Uninsured	Percentage of persons aged 0–64 years who are uninsured	ACS 5-Year Estimates	Census Tract, Tribal Area
	Access to Care: Mental Health Providers	Ratio of populations to mental health providers	Health Resources and Service Administration	County
	Access to Care: Dentists	Ratio of population to dentists	Health Resources and Service Administration	County
<b>Education Access and Quality</b>	Educational Attainment	Adults aged 25 and over with a high school diploma or equivalent.	ACS 5-Year Estimates	Census Tract, Tribal Area
	High-School Drop-Out Rate	Percentage of public high schoolers who do not graduate	ACS 5-Year Estimates	Census Tract



Category	Indicator	Measure	Source	Geographic Availability
Education Access and Quality (cont'd)	English Language Learners	Percentage of people in households where no one 14 years or older speaks English only or speaks English very well	ACS 5-Year Estimates	Census Tract
	Preschool Enrollment	Populations three years and over enrolled in school	ACS 5-Year Estimates	Census Tract, Tribal Area

### SYSTEMS OF POWER, PRIVILEGE, AND OPPRESSION

Indicator	Measure	Source	Geographic Availability
Income Inequality - Gini Coefficient Index	The mean absolute difference between minority proportions weighted across all pairs of areal units, expressed as a proportion of the maximum weighted mean difference	ACS 5-Year Estimates	Census Tract
Economic Segregation - Area Deprivation Index	Composite measure of neighborhood socioeconomic disadvantage that uses 17 census measures capturing education, employment, income, poverty, and housing characteristics	ACS 5-Year Estimates	Census Tract
Residential Segregation	Index of dissimilarity where higher values indicate greater residential segregation between non-White and White county residents	ACS 5-Year Estimates	Census Tract
Eviction Rate	Subset of homes that received an eviction judgement in which renters were ordered to leave	Eviction Lab	Data availability varies by geography
Voter Turnout	Voter turnout by select characteristics (age, sex, race and Hispanic origin, educational attainment, poverty status)	ACS 5-Year Estimates	Census Tract
Voter Registration	Voting-age population by selected characteristics (age, sex, race and Hispanic origin, educational attainment, poverty status)	ACS 1-Year Estimates	Census Tract
Employment-Population Ratio	The proportion of the population that is employed	U.S. Bureau of Labor Statistics	State
Police Officers	Police officers per 100,000 residents	Uniform Crime Reporting Program	State, Law Enforcement Agency
Corrections Population	Total incarcerated, prison and jail	U.S. Bureau of Justice Statistics – The Sentencing Project	County

# D. Indicator Criteria Matrix

An Excel version is available from the MAPP 2.0 Tools folder at [naccho.org/mapp](http://naccho.org/mapp)

Measure	Stratified by geography (state, county, census tract, neighborhood, Tribal area)	Available - Data are available at single point in time and over time	Stable and timely	Ability to use data across settings - The ability to collect comparable and consistent data across sites	Public health burden - Relative significance to the health and well-being of the community	Trend data are available for the past five years	Reflect intent to address equity in community/ jurisdiction - Metrics capture root causes or social determinants of health	Data Quality (e.g., adequate sample size, valid measure)	Stratified by demographics (e.g., age, race/ethnicity)	Aligns with goals and guiding principles for the process/ framework

# E. Quantitative Data Collection Methods

## Primary and Secondary Methods to Collect Data

**Primary methods** include collecting new data from a person or through observation.

**Secondary methods** include collecting data from existing sources.

PRIMARY METHODS	DESCRIPTION	OPTIONS BASED ON RESOURCES AND CAPACITY		
		Good	Better	Best
Surveys	<p>Surveys gather quantitative data that can be summarized as a percent or number to understand an issue. Most surveys are developed as a questionnaire with closed-ended questions (e.g., yes or no). Surveys can include some open-ended questions to get more information from the participant (e.g., understanding how or why).</p> <ul style="list-style-type: none"> <li>Pros: Convenient, inexpensive, and can be used to collect data from a large population. Can be conducted online, in person, or by phone.</li> <li>Cons: Has response bias, meaning responses do not represent the broader population, which can be an issue if you do not use representative/random sampling methods when inviting participants.</li> </ul>	<ul style="list-style-type: none"> <li>Use survey questions from valid and reliable tools (e.g., BRFSS)</li> <li>Use <b>convenience or snowball sampling</b> for data collection (e.g., invite people you know to participate)</li> </ul>	<ul style="list-style-type: none"> <li>Use survey questions from valid and reliable tools (e.g., BRFSS)</li> <li>Use <b>cluster or stratified sampling</b> for data collection (e.g., select specific clusters such as organizations, schools, or other groups who share experiences and randomly select participants within those clusters to participate in the survey)</li> <li>Provide incentive for participants</li> <li>Compare results to national/state/Tribal/regional/county level trends</li> </ul>	<ul style="list-style-type: none"> <li>Use survey questions from valid and reliable tools (e.g., BRFSS)</li> <li>Aim for a <b>representative sample</b> (e.g., randomly select and invite participants from all the people who live within certain zip codes, communities, or Tribes). This method is used in most national public health surveillance surveys and requires more resources and time</li> <li>Oversample underrepresented and hard to reach populations</li> <li>Provide incentive for participants</li> <li>Compare results to national/state/Tribal/regional/county level trends</li> </ul>



PRIMARY METHODS	DESCRIPTION	OPTIONS BASED ON RESOURCES AND CAPACITY		
		Good	Better	Best
Observations	Observational methods are designed to gather data by observing, watching, or listening. For example, a walk audit of a neighborhood could be designed to understand how community members experience sidewalks, public transportation, public spaces, public safety, and more. Like a survey, a walk audit would be designed with closed-ended questions or statements. Unlike a survey, the observer is the participant and records data from their observations.	<ul style="list-style-type: none"> <li>• Develop a brief form to complete when observing, watching, or listening to the topic of interest</li> <li>• Train 1 team member to use the form</li> <li>• Identify 1–2 locations where observations can be recorded</li> </ul>	<ul style="list-style-type: none"> <li>• Develop a brief form in collaboration with community advisory board to complete when observing, watching, or listening to the topic of interest</li> <li>• Train 2–3 team members to use the form</li> <li>• Identify 3–5 locations where observations can be recorded and later compared</li> <li>• Consider other ways to record observations (e.g., photos, video)</li> </ul>	<ul style="list-style-type: none"> <li>• Develop a brief form in collaboration with community advisory board to complete when observing, watching, or listening to the topic of interest</li> <li>• Train 4–8 team members to use the form</li> <li>• Identify 6–10 locations where observations can be recorded and later compared</li> <li>• Use other ways to record observations through pictures, videos, etc.</li> <li>• Recruit community members/partners to complete and submit the form. Collect basic demographic information to account for location of observations and other contextual details. Consider offering payment or incentive for participating community members</li> </ul>

SECONDARY METHODS	DESCRIPTION	OPTIONS BASED ON RESOURCES AND CAPACITY		
		Good	Better	Best
<b>Extracting Publicly Available Secondary Data</b>	<p>This method involves data mining or extracting publicly available data from data dashboards and other governmental websites (e.g., BRFSS, Census, American Community Survey). Secondary data are abundant in public health and availability has improved with the advent of data dashboards and online data centers.</p> <p>Anyone may access publicly available secondary data at any time and for free. However, identifying indicators and extracting/downloading secondary data may require data-management skills. This form of data can be used to compile descriptive statistics (e.g., prevalence, count, or incidence of a condition) or to conduct statistical analysis (e.g., predictive modeling) to look for patterns of disease or exposure and identify risk and protective factors.</p>	<ul style="list-style-type: none"> <li>• Use summary tables with data from secondary data source to find data specific to the indicators in your CSA</li> <li>• Filter data by geography to find the lowest level of data available on your community</li> <li>• Filter data by year to explore trends over time</li> <li>• Document the source and develop a table to share results</li> </ul>	<ul style="list-style-type: none"> <li>• Download raw data from publicly available data source</li> <li>• Clean data and narrow to specific indicators in your CSA by geography and years</li> <li>• Run descriptive statistics for key indicators (e.g., prevalence, count, incidence)</li> <li>• Document source and develop data visualization products to share results (e.g., infographic)</li> </ul>	<ul style="list-style-type: none"> <li>• Download raw data from publicly available data source</li> <li>• Clean data and narrow to specific indicators in your CSA by geography and years</li> <li>• Run descriptive statistics for key indicators (e.g., prevalence, count, incidence) and correlational analyses to examine relationships across indicators</li> <li>• Document source and develop data visualization products to share results including a data dashboard, social media graphics, data briefs</li> <li>• Use interactive mapping techniques to visualize place-based inequities and examine potential solutions to address</li> </ul>
<b>Obtaining Surveillance Data from Health Systems or Health Departments</b>	<p>Requesting de-identified data from state, city, county, or Tribal health departments, health systems (including hospitals) is another option when the data you need are not available from public data dashboards. A data request is usually required with detailed plans about your purpose, indicators/variables of interest, statistical methods, privacy, confidentiality, and more. Some requests require human subjects research approval or review from an institutional review board or ethics review board.</p>			

# F. Data Collection Plan Template

An Excel version is available from the MAPP 2.0 Tools folder at [naccho.org/mapp](http://naccho.org/mapp)

Select What to Measure	Measure	Data-Collection Methods	Data-Collection Instrument	Sample	Data-Collection Process	Duration	Timeline	Person(s) Responsible	Data Analysis
<i>What question do you want to answer specific to the CSA?</i>	<i>What measure will demonstrate action and progress on outcomes?</i>	<i>What specific method(s) will you use to collect data (e.g. survey, secondary data, mapping)?</i>	<i>What type of instrument will you use to collect data (e.g., online tool like SurveyMonkey or paper survey)?</i>	<i>Whom will you invite to participate in data collection, including people by demographics (e.g., low-income, rural, Tribal)?</i>	<i>How will you collect data (e.g., give survey at community meeting)?</i>	<i>How long will data be collected?</i>	<i>When will data collection occur throughout the project?</i>	<i>Who will be responsible for data collection?</i>	<i>What type of analysis will be conducted? Ensure analysis will address the CSA questions.</i>



## G. Continuous Quality Improvement Tool

Continuous Quality Improvement (CQI) is pausing to ask, “How can we do this better?” throughout facilitation of the CSA process. CQI is regularly practiced but often referred to by other names within healthcare settings, when facilitating grants and contracts, and when completing health and status assessments at the community level. Many workgroups find it useful to do a CQI process each quarter to ensure systems for the CSA are useful.

This guide simplifies the CQI process and suggests resources to help you think about how to include CQI in your CSA process.



### Identify

Review your process. Can you improve any part of it? Should it include other voices? Can you change the way you collect and share data?

### Plan

Create a plan for any change. Who will facilitate the change? What is the timeline for the change? Try the change on a small scale and check for needed shifts.

### Execute

Make the change on a larger scale. Engage stakeholders and community members in the process.

### Review

Use data to analyze the results of the change and determine whether it made a difference in the overall project or data collection.



### Resources for CQI Practice

**Quality Improvement Essentials Toolkit**  
*Institute for Healthcare Improvement*

**Continuous Quality Improvement (CQI) Strategies to Optimize your Practice**  
*National Learning Consortium (Health Information Technology Research Center)*

**CQI Toolkit** — *Recency Learning Hub*

**Worksheet for Developing Your Quality Improvement Project**  
*Hopkins Medicine, Armstrong Institute*

**Quality Improvement Plan Toolkit**  
*Association of State and Territorial Health Officials*

# CQI Worksheet

Change to CSA Process (what did you add or omit from the data?)	Pilot implementation date	Any change in data?	Large-scale implementation date	Any change in data?



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