Data into Action to Support Community Initiatives Toolkit

The Center for Children, Families, and Workforce Development created this toolkit to make it easier to access, understand, and use data to assess community needs, and evaluate the impact of interventions.

Data Section

What is Data and Why Do We Use it?

Data

Data is information, and it is everywhere! Data is a collection of facts, such as numbers, words, measurements, observations, or even just a description of things.

[Video Link: Why Data is Key to Community Change](#)

Common Types of Data

Quantitative data: information about things you can measure objectively and numerically, such as how many, how much, or how often.

Qualitative data: information that describes characteristics and details allowing for a deeper understanding. Qualitative data helps to explain the opinions and motivations of people.

Primary data: data collected first hand by surveys, interviews, or experiments.

Secondary data: data that already exists such as online articles, official statistics, or results of other research.

Longitudinal data: data is collected from the sample of subjects repeatedly over a period of time.

Cross Sectional: data collected at one point in time across a sample population.

Why use Data?

Analyzing data can identify trends over time and lead decision-makers to pursue actions to improve outcomes. Understanding trends can strengthen the planning and sustainability of programs and policies.

Data can be used to:

1. Educate communities: data can highlight areas of strength and areas of need.
2. Develop priorities: data can guide the development of specific strategies to address priority issues in the community.
3. Acquire resources: data help build your case when seeking external funding by demonstrating the key characteristics of your community.
4. Develop policies: data can help policymakers understand the problem they seek to address. Data, rather than assumptions, should be the basis for this understanding.
5. Evaluate programs: data tells the story of the program's overall impact. What is the baseline? What changes occurred as a result of the program's efforts?

Data Attributes

Population vs. Individual
- Population-based data represents everyone in the community.
- Individual data represents that individual.

Population Sample Data
- Include a specific proportion of the population that is representative of the whole.

Aggregate vs. Disaggregated
- Aggregated data are data compiled and summarized. Aggregating data provides information about a group. For example, information about whether students graduated from college can be aggregated into a single graduation rate for Montana.
- Disaggregated data is to break down aggregated data into smaller units of data. For example, the graduation data can be disaggregated by geographic location, age, race/ethnicity, socio-economic status.

Data Resources

Montana Data Dashboard Center for Children Families and Workforce Development
A collection of common health indicators as well as data that is unique to the experience of individuals living in Montana. Data are available by county, with state and national comparisons.

[Video Montana Data Dashboard Tutorial](#)

[Montana Data Dashboard](#)

Demographic Data
US Census Bureau: The census is conducted every ten years. Access information from a variety of census sources - people, population, poverty, economy. [Census website.](#)

American Community Survey (ACS): The ACS is conducted every year to track changing social and economic characteristics such as education, housing and jobs. [ACS website.](#)

Economic Data
Montana Department of Labor and Industry: Montana's economic data, unemployment, employment by industry, labor force statistics, wages. [MT Department of Labor website](#).

Health Data
County Health Rankings: Search by county. Health outcome data, health factors, health behaviors. [County Health Rankings website.](#)

Montana Public Health Information System: Morbidity data, vital records, birth and death data, population data. [Montana Public Health Information System website.](#)

Community Health Assessment (CHA): CHA examines health status indicators for a given population to identify key health issues in the community. [CHA resources.](#)

Children and Youth Data

Montana Youth Risk Behavior Survey (YRBS): The YRBS aims to identify the leading causes of mortality, morbidity, and social problems among youth. Includes students 9th through 12th grade. [YRBS website.](#)

Montana Prevention Needs Assessment: Assesses student involvement in a specific set of problem behaviors, as well as exposure to risk and protective factors. Includes 8th, 10th, and 12th grade students. [MTPNA website.](#)

Kids Count Data: A comprehensive set of indicators assessing child well-being in the United States. Data are available at the county, state, and national levels. [Kids Count website.](#)

Education Data

Growth and Enhancement of Montana Schools: Student achievement, graduation rates, student enrollment, programs and course offerings, district and school profiles. [GEMS website.](#)

Examples of Local Data Sources

[Child Care Resource and Referral website](#) annual report on services, finding and paying for childcare, STARS quality childcare, childcare training, childcare licensing resources, parent coaching, meal subsidies.

[Early Childhood Coalition Website](#) - Local coalition contact information, Best Beginnings Scholarship, quality child care, resources for parents and childcare providers.

[Head Start Website](#) and [Early Head Start Website](#) - Local provider contact information, information on child development and school readiness, needs assessment, resources for parents.

[Human Resource Development Council Website](#) - Local HRDC contact information, community action programs and resources.

[Health Department Website](#) - Services for children, families, people with disabilities, seniors, healthcare, Medicaid, and government assistance.

[Chamber of Commerce Website](#) - Education for businesses, strategic planning.

Collecting Your Own Data

Gathering new data can complement secondary data sources. The collection of local data can help fill the gaps, identify critical themes, and provide information not included in secondary data sources.

For example, if childcare capacity is a challenge in your community, information about childcare barriers (cost, access, awareness, transportation, etc.) can provide critical information on how to best address the issue.

There are a variety of ways to collect data. Choose the method which best suits the information you need and your timeline.

Always ensure you have informed consent from every participant. Participants should know that their participation is voluntary and confidential. They should know what the data will be used for and how it will be stored.

[Data Ethics Video.](#)

Guidelines for Data Collection

Collecting data from the community can be a daunting task. Below are some guidelines to help you get started with gathering the right information from the right people.

1. What is the problem you are trying to address? What is your research or evaluation question? A specific question will give you direction to find data to address the problem. For example, The community problem you might be addressing is child abuse, and your specific question might be, "Is poverty a risk factor for child abuse?" or "Would the Parents as Teachers program be a protective factor for child abuse in our community?"
2. What are you going to do with the information? For example, you could use it for a cost-benefit analysis, new program planning, evaluate current programming, community needs assessment.
3. Who do you want to get information from? Will participants be a good representation of the target population? For example, you might ask individuals, community groups, state officials, schools, hospitals, veterans, homeless, etc.
4. How will you gather information? For example, you could conduct a survey, interview, focus group, community forum, document analysis, observation, or review census data/research database.
5. Who will collect the information? For example, you could collect the data yourself, ask an outside research agency, University students or local community members to help.
6. Have you gained informed consent from potential participants? Participation is voluntary and the information needs to be kept confidential. Explain to the participants why the information is being collected and how it will be kept safe. For example, you could have a written consent form for people to sign or get verbal consent, either way it is important to keep the participants informed of the process and you ensure the information stays confidential.

Survey

- Purpose: to gather information and community input from people quickly.
- Data type: primarily quantitatve. Can collect qualitative data by allowing open ended responses.

- Examples of data sources: surveys can be administered by phone, face to face, paper, mail, or web-based.
- Advantages: easy to compare and analyze, administer to any sample size, and collect a lot of data at once.
- Disadvantages: possible response, sampling, and question bias. Challenging to get a high response rate, Impersonal, might not capture the whole story.

Interview

- Purpose: to fully understand one person's thoughts and experience through indepth conversation.
- Data type: Primarily qualitative. Can collect quantitative data by coding participant responses into theme topics.
- Examples of data sources: Document questions and answers of the program participant, community stakeholder, and collaborative member.
- Advantages: Get a full range and depth of information. Allows for flexibility in the interview.
- Disadvantages: It can be time consuming to analyze the data. Need a good interviewer to avoid question bias. Data reflects only individual experiences.

Focus Group

- Purpose: to gather information and opinions from a small group of participants.
- Data type: primarily qualitative. Can collect quantitative data by coding participant responses into theme topics.
- Examples of data sources: Document questions and answers of focus group participants.
- Advantages: collect common impressions quickly, efficient way to get a range and depth of information, capture multiple perspectives about programs.
- Disadvantages: can be difficult to analyze responses, scheduling difficulties, trained facilitator to avoid question bias, can be time consuming.

Document Analysis

- Purpose: Get an impression of how a program operates without interrupting the program.
- Data type: Primarily quantitative. (Can collect qualitative data by collecting documented narratives).
- Examples of data sources: Review of program applications, finances, memos, meeting minutes.
- Advantages: does not interrupt program, unbiased historical information about the program already exists, inexpensive.
- Disadvantages: information may be incomplete, data is restricted to what is available, can be time consuming.

Observation

- Purpose: Gather information about how a program operates.
- Data type: Primarily qualitative. Can collect quantitative data by coding observations.
- Examples of data sources: Trained field observer takes notes about observations.
- Advantages: View operations of a program as they are occurring.
- Disadvantages: Need a trained observer. Can be difficult to interpret and categorize behaviors. Observer's presence could influence behavior of participants.

Case Study
- Purpose: Fully learn about a client's experience in a program and conduct a comprehensive examination.
- Data type: Primarily qualitative. Can collect quantitative data by coding observations, using surveys and document analysis.
- Examples of data sources: In-depth interviews, longitudinal observations of a particular person, group, event or program.
- Advantages: fully describe the participant's experience in a program. Thorough way to portray a program to outsiders.
- Disadvantages: Represents depth of information from one perspective. Very time consuming to collect data.

Data Based Decision Making

Tell the Story of your Data

Understanding and interpreting data can be a daunting task, but using data in decision-making is vital to creating policies and providing services that best serve the population.

Data-based decision making involves making decisions that are backed up by research rather than making decisions that are intuitive or based on observation alone.

When you have completed your data collection, it is important to understand what the data is saying, so you have a better idea of what to do with it. Once you know the story of the data, you can make an informed decision about what to do next.

Identify the Question

As described in the last section, how to collect your data, it is important to identify the main problem/challenge in your community and what your specific question is regarding the problem.

For example, your problem is that the majority of children are not arriving at kindergarten ready, your question might be, "what are the key predictors of school readiness in kindergarten students?"

Collect and Organize Data

Collect your data using primary or secondary sources. Can you organize the data by demographic characteristics (age, race/ethnicity, income level, or location)? Categorizing the data can often uncover significant differences among the target population and help you see how different populations are affected by the problem. For example, using the question, "what are the key predictors of school readiness in kindergarten students?" You might conduct a kindergarten readiness assessment with students during the first few weeks of school. In addition, conduct a survey with parents on the child's early experiences and family characteristics.

Analyze Data

It is hard to make sense of data without context. After you have collected and organized your data, it is helpful to compare your data to state or national recommendations or compare your findings with prior years or a similar community. If data is available, take a look at trends over time, what was the problem

like 5 years ago? 10 years ago? For example, regarding the question, "what are the key predictors of school readiness in kindergarten students?" You might not have any prior data to review. In that case, the data you collect can help establish a baseline, so the community can see whether or not the strategies being implemented are having an impact on school readiness in kindergarten students over time.

Share your Results

When you are prepared to share your results, there are a few questions you need to answer.

1. What data is most important to share?
2. How should I present the data? (e.g., graphs, numbers, storyline, examples).
3. Who needs to see this data? (e.g., legislators, stakeholders, community members, early childhood professionals, teachers, parents).
4. How will you get the word out? (e.g., community presentation, fact sheet, website, local media).
5. How do you want to receive feedback? (e.g., phone, email, in-person meeting).

For example, continuing with the example of school readiness, after working through the questions above, you determine the best way to share the data is to have a community forum and invite members of the school district, families, and early education providers. After sharing your results, it is important to create a committee to work on brainstorming ways to integrate the information into our early education system.

Implement Change

The final step in making data-based decisions is to implement change in your community based on your research and the feedback you receive. Create a committee of people invested in your research and start planning on how to use the data to inform future decisions regarding the problem.

For example, after the community forum, send around a signup sheet for a follow-up meeting in two weeks. At the follow-up meeting, discuss the results and determine strategies that address the primary findings. Make a plan for how to implement change in your community.

Summary

Analyzing the data to determine the next step for your program will help your team be informed consumers of the data and streamline the process of change. Understand what your data is telling you about your community, look at recommendations for your topic, compare your data with other county or agency data, and review what has changed over the last 5, 10, 15 years. By understanding what the data is telling us, we are more likely to use that data to inform future decisions.

Video Data Driven Policy Making

Data Limitations

It is important to understand there are strengths and limitations to all data. When collecting data, it is critical to be aware of the limitations and challenges associated with data collection, so you can create solutions to get the most accurate data.

Consider the following:

- Data could be incomplete: Missing values in a data set, unreturned surveys or lacking certain populations of people.
- Biased questions: Data from surveys, interviews or focus groups could be skewed due to evaluator bias in the questions such as using leading questions.
- Self report data could be inaccurate: Due to human error in answering questions, participants might not be totally truthful.
- Data quality and reliability: Data collected from different sources could vary in terms of quality and reliability. Ensure your information is coming from reputable sources.
- Comparing secondary data with primary data: Secondary data sources can change how things are measured overtime making historical comparisons difficult. Find the most recent and relevant data you can.
- Sample size: Is your sample representative of the target population? Are you able to get a large enough sample size to generalize findings?
- Measurements: Are you using appropriate measures to collect your data? (E.g. survey, focus group, interviews). Is the way you collected data helpful to measure your intended indicators? For example, was collecting qualitative data from a focus group helpful to inform your decision making or would a quantitative survey been more informative?
- Cultural awareness and language: Be informed of culture, norms, beliefs and language of the target population. What changes might you make to help your target population feel respected and empowered?

Video The Limitations and Challenges of Data

Assessment

What is a needs assessment?

A needs assessment is a process that attempts to understand the needs of an individual, group, or community, and determine if there are gaps in services or programs. It can identify the deficiencies in the community, such as gaps in services, unmet needs of the community, and identify problems with established programs. A needs assessment provides a logical starting point for program development and can be used to assess current program strengths and limitations.

Why conduct a needs assessment?

- Explore existing problems with a target population and determine if new programming is feasible.
- Prioritize allocation of funding to programs that need assistance.
- Determine if there are other programs or interventions that already exist to address the problem.
- Determine if the target population feels current interventions and programs are acceptable.
- Identify barriers that prevent clients from utilizing existing services.
- Gather information on how to create a program tailored to the specific target population.

How to Conduct a Needs Assessment

Step 1 what is the purpose of conducting a needs assessment?

- Who is the focus? Are you looking at the needs of the elderly in an assisted living home, or are you looking at the overall health needs of your community?

- What stakeholders need to be involved? Program staff, program participants, community leaders, state officials.
- What is your budget and what resources do you have?
- What is your timeline? Can you do multiple focus groups over a year, or should you use a survey to get information more quickly?
- For example, a Local Community Collaborative (LCC) wants to conduct a needs assessment is to determine what the community feels is the most important need regarding children and families. The stakeholders would be community members with children, agencies or programs that work with children and families such as schools, mental health agencies and early childcare, and other community members interested in supporting children and families. The budget is minimal so a short online survey will be distributed to get multiple answers within a month long period.

Step 2 identify the specific information you need to acquire
- Make sure you are asking questions relevant to your purpose.
- What do you need to know to make an informed decision? Exclude irrelevant information.
- For example, when creating the survey questions, be sure to ask questions regarding children and family's needs. What struggles do families face in the community? What would be helpful to parents? What do children in the community need to be successful?
- In this instance, asking questions about income might be useful, but it also might detract from the purpose which is to ask what needs children and families have in your community.

Step 3 determine what information already exists
- Collaborate with other service providers to obtain information about the issue.
- For example, explore the programs already available in your community. What services are currently available to children and families? What is missing? Have other agencies heard about a need in the community? Is anyone else in the community working to evaluate child and family programming?

Step 4 develop a needs assessment plan
- What questions will you ask? After reviewing available information, what do you still need to know?
- Who will you contact to gather information? E.g., program staff, program participants, community members, state officials.
- How will you collect data? E.g., data analysis, survey, interview, focus group, public forum.
- For example, after collaborating with other community agencies, what did you find out? What do you still need to ask about and who do you need to ask? Do you need to broaden your target population to include pediatricians or do you just focus on asking parents? Do you feel a survey will still be the best way to gather information or would a public forum or focus groups be more effective?

Step 5 collect and analyze your data
- Quantitative data can be sorted relatively quickly, while qualitative data will need to be coded or sorted into themes before it can analyzed.
- Do you need additional support to analyze data? Do you understand the data well enough to explain it to others?

- For example, you decided you found enough information on programs and services already available in your community so you will focus your attention on getting information from parents. In order to reach as many families as possible, you might decide to first offer an online survey and then invite parents to attend a public forum to discuss needs in the community. By using two forms of data collection you will increase the number of participants and get both quantitative and qualitative data. Once you have collected the information it is time to determine what it means.

Step 6 prepare your report

- Write down your main ideas and findings.
- Create tables or visuals to explain findings in further detail.
- Explain the importance of findings and how it impacts your community.
- For example, after analyzing and sorting your data what are a few of the main points? Can you put your survey data into a table or graph or visually illustrate the findings? Can you group the qualitative data from the public forum into themes? What does the data tell you and how does the information effect the community?

Step 7 share the results with community stakeholders

- First, share results with a key stakeholders to discuss findings and any misinterpreted or forgotten sections.
- Keep community stakeholders involved because they hold power to implement new programs or change existing ones.
- For example, when you are ready to share your results, present your findings to a small group of key stakeholders such as the local school administration and Early Head Start administration. By sharing your results with a smaller group of key stakeholders first, you are better able to hear feedback and make changes before presenting the information to the public. If your research will possibly change policy or add programming to your community, it is important to discuss the changes with the key stakeholders who have the power to help put a plan into action.

Step 8 share results with the community

- Provide a one page brief of the main findings to interested parties.
- Have data available for others to view.
- For example, after meeting with key stakeholders, identify the main findings of what the needs are in your community and present it to the public in an open forum. You will want to have information regarding the purpose of the needs assessment and your data collection to engage in a conversation about what your findings mean for the community. Finally, you will want to make an action plan to use the data to create change in your community. Will you use the data to create programming or apply for government funding? Will you continue to meet with community members to determine the next course of action?

Summary

There is no exact right or wrong way to conduct a needs assessment but be aware of your time, budget, and resources. Ensure that you are asking questions to the people who will be most affected. It is important to get buy in from the key stakeholders who have the power to influence others but it is just as critical to work with community members to learn what is most needed in the community and brainstorm

viable ways to make it happen. A needs assessment can empower the community to create change that is sustainable.

Evaluation Section

Evaluation: what it is and why we do it

Please note: In this section the term program is used to describe the effort that is being evaluated. This could represent activities of an initiative, community coalition, agency, or program**.**

Evaluation

The Innovation Network Evaluation Plan Workbook defines evaluation as the systemic collection of information about a program that enables stakeholders to understand the program better, improve its effectiveness, and make decisions about future programming. The Center for Disease Control and Prevention states program evaluation is a way to improve public health outcomes by involving procedures that are useful, feasible, ethical, and accurate.

Why Evaluate?

Evaluation can serve many purposes. It can be a tool to assess partnerships, determine if a program is being implemented as intended, improve a program or policy, or demonstrate to outside stakeholders the impact of your efforts. The purpose of the evaluation will determine what type of evaluation will be most useful.

- Required evaluation - mandatory for continued funding and support.
- Evaluation of new interventions - determine if the new program is effective.
- Evaluation for accountability - document the strengths and limitations of a program or agency.
- Competition for scarce funds - when competing for scarce funds, data to demonstrate program effectiveness increases the likelihood your program will continue to secure funding.

Formative Evaluation

- Formative evaluation is conducted when a new program is being developed. It determines if the program is feasible, appropriate, and accepted by the population you want to reach. It provides valuable data that can inform modifications before the program is fully implemented.
- For example: During the development of an afterschool physical activity and nutrition program for families, engage parents in a focus group to gather feedback on barriers to supporting family nutrition and activity.

Process Evaluation

- Process evaluation focuses on the implementation of program activities and determines whether strategies were implemented as intended and whether the expected output was produced. Process evaluations can be conducted throughout all phases of your program.

- For example: Review participant data to see if the program engaged the target population.
- Gather feedback from key stakeholders and workgroup members to determine if internal systems are contributing to progress towards goals.

Outcome/Impact Evaluation
- Outcome evaluation determines I the program achieves its stated goals, and had the desired effect on the target population.
- For example: Conduct a pre and post-program survey with participants to determine if the parenting program implemented achieved the desired outcome of increasing parents' knowledge on early childhood development.
- Based on strategies implemented in a child welfare program, review data before and after the intervention to determine if it contributed to a decrease in the amount of time children were in out of home placements.

Creating an Evaluation Plan

Evaluation Plan

Once you have determined your program's readiness to evaluate and have discussed the purpose of the evaluation, it is time to build an evaluation plan. An evaluation plan organizes questions and creates a strategy to get answers.

An evaluation plan is built off of a clear program strategy. Before you can successfully evaluate efforts, it is important to determine what you are evaluating, and the strategy that will be implemented to achieve the desired outcome. A logic model or strategy map will form the foundation of your evaluation plan. If you haven't developed a logic model for your program, jump over to the best practice section, and create a logic model.

The County Health Rankings Steps to Move Your Community Forward Action Learning Guide has an evaluation plan template that can be used to design your evaluation. County Health Rankings Evaluation Plan Template.

Step 1 Evaluation Questions

Developing a clear set of evaluation questions will determine the type of information to collect and specific indicators to track.

Planning (formative) and implementation (process) evaluation:
- Are you performing the service or activities as planned?
- To what extent was there program fidelity (adherence to program design/model)?
- Is the program reaching the target population?
- Were potential participants aware of the program?
- How do the participants perceive these services and activities?

Impact evaluation (outcome): What difference did you make? Is anyone better off?
- Did the program produce the intended effects?
- Did participants show a change in beliefs, attitudes, or behaviors?
- What are the results of your work?

Step 2 Identifying Outcomes and Indicators

After developing evaluation questions, it is time to identify process and impact measures and sources of data to answer your questions. But first, let's start by reviewing some key terms.

- Result: The desired conditions of well-being for our children, families, and the community as a whole. For example, all children have a healthy start.
- Goal: Broad measurable statements of intent to set a future direction. For example, increase the number of children with health insurance.
- Indicator: A measure that quantifies the achievement of a result. Indicators can be statewide or county/local indicators. For example, the percentage of women receiving prenatal care in the first trimester. The percentage of children living below the federal poverty level, the percentage of children with health insurance, the rate of immunization by age two.
- Baseline: A starting point. A measure of how things are before efforts have been implemented. For example, in 2015, 60% of women in Badger County accessed prenatal care during their first trimester. The Healthy Pregnancies Collaborative brought together key stakeholders across the county to address this health issue. The Collaborative tracked the indicator throughout their work as they sought to increase the percentage to 70% by 2020.
- Strategies: Activities designed to achieve the desired result. For example, Initiate or expand evidence-based home visiting models. Outreach campaign to increase knowledge on vaccinations, child health, and development.
- Performance/Program Measures: Measures that assess a program, activity, or service (what did we do? how well did we do it? what difference did we make?). For example, the number of new home visiting models implemented in communities. Participant evaluations of home visiting programs. Family outcomes (parent-child interactions, child health and development, and family economic self-sufficiency) from participation in home visiting programs.

Formative or Process Measures:

- Activities: number of meetings with stakeholders, number of workshops held, number of policies developed.
- Participation: target audience participation in workshops and events, website hits, program satisfaction.
- Communication: number of newsletters sent, social media posts, media campaigns.
- Quality: value of services/events/programs to the target population.
- Context: factors that influenced ability to implement program as planned.

Impact or Outcome Measures: The changes you expect to see as a result of your efforts.

- Participant level indicators: changes in knowledge, behavior, and attitudes. (Percentage of program participants with increased knowledge on maternal health).
- Community level indicators: measures that refer to population groups rather than individuals. (Low Birth Weight - percentage of babies born below 2,500 grams or 5.5 pounds).

Selecting Indicators

More data is not always better. Be selective! In the book, Trying Hard is Not Good Enough, Mark Friedman outlines criteria for selecting indicators. Click on each number below to learn more about the criteria: Communication Power, Representation Power, and Data Power.

- Communication Power: Does the indicator communicate to a broad and diverse audience? Public Square Test: If you had to stand in a public square and explain the results to your neighbors, what pieces of data would be the most powerful. Think common sense and compelling.
- Representation Power: Does the indicator say something of central importance about the result? Data tend to run in herds. If one indicator is going in the right direction, usually others are as well. Choose the indicator that has the greatest proxy power.
- Data Power: Do we have quality data on a timely basis? Is the data available at the state, county, and community level?

Choosing SMART Indicators

Let's say you are trying to determine if a parenting class is a quality intervention and worth expanding.

- Specific - The indicator needs to be specific. While the outcome can be broad, the indicator should be narrow and focus on the "what" and "who" of the intervention. For example, parents will increase their knowledge of developmental stages from birth to five years of age by attending a weekly parenting class for four weeks.
- Measurable - The indicator needs to be measurable. How will you know if the outcome has been achieved? For example, the percent of parents able to name core developmental outcomes in children, and activities to support child development, at the start of the class compared to the end of the class collected by a self-report pre-post survey.
- Attainable - The indicator needs to be realistic to measure, and cost-effective. The target attached to the indicator should be achievable. For example, is it realistic to expect 100% of parents to complete the full 8-week parenting class if, in past sessions, only 50% completed the class? A more realistic target would be 60-70%.
- Relevant - Does your indicator connect to your outcome? For example, if the goal of the class is to increase parents' knowledge of child development, your indicator needs to measure changes in knowledge specific to the course content.
- Time-bound - Your indicator needs to have a time frame. Think about the time necessary to collect data, when you will collect the data, how long it will take to analyze the data, and when the data will be used to implement change. For example, you could take count of the parents who attended class each week and after the final class compare the data to previous years parenting class attendance to determine at what point the course experiences the highest attrition.

Step 3 Collecting Data

After determining what you want to evaluate, and identifying what you will measure, it is time to plan your methods for collecting data.

- After determining what you want to evaluate, and identifying what you will measure, it is time to plan your methods for collecting data.
- What information has already been collected by other sources? What new information will you need to collect?
- What types of data do you need to answer your evaluation questions? (Consider using both quantitative data and qualitative data).
- Which methods are best suited for your target population? (Think about participant age, cultural perspectives, literacy needs).
- What tools will elicit information? How was the tool developed? Is it valid and reliable?
- Consider the cost and time required for different methods.
- How will you analyze the data? Will you need support with analysis?

Step 4 Data Analysis

Once you have collected the data you need, it is time to analyze the data to monitor progress toward desired outcomes.

There are two main types of data analysis: quantitative and qualitative.
1. Quantitative data seeks to answer "how many, how much, how often?"
2. Qualitative data seeks to answer "how and why did this happened?"

Steps in Quantitative Data Analysis

- Descriptive statistics: Are the basic measures used to describe survey data. It involves analysis to describe or summarize data in a meaningful way, such as mean, percentages, variance, and distribution.
- The steps of quantitative data are relatively straight forward:
  - Describe the problem
  - Review the literature about the problem
  - Ask a question
  - Determine your sample
  - Choose your data collection method - remember to answer the questions: how much, how many, or how often?
  - Collect the data
  - Review the data
  - Report your findings
- For example, a pre-post survey analysis to determine if participants' mean (average) knowledge increased as a result of program participation.

Steps in Qualitative Analysis

Qualitative data analysis is a means to reduce and transform raw data (interviews, focus groups, open-ended survey questions) into common ideas and overarching themes.

Step 1 Reading

Reading and rereading each set of notes or transcripts until you are intimately familiar with the content.

Step 2 Coding

Coding the data by identifying emerging themes. For example, conflicting activities, transportation, and cost could all be categorized as barriers to participation when analyzing transcripts evaluating an after school physical activity program.

Step 3 Data Reduction: Getting the Big Picture

The process of distilling the information to make visible the most essential concepts and relationships, taking a step back to get an overall sense of the data, and distinguish central and secondary themes.

Step 4 Interpretation

The act of identifying and explaining the data's core meaning. The purpose is not to list pages of interesting themes and their examples, instead, to identify ways that the many different pieces of the research puzzle fit and what it all means.

Video Qualitative Data The Basics

Step 5 Using Results to Inform Change

After completing an evaluation, it is important to review and reflect on key findings and determine the next steps. Gather the original group that helped develop the evaluation plan. Have your efforts made any progress on addressing the initial problem identified?

The Community Toolbox outlines key reflection questions to initiate this discussion:

1. What are we seeing?
2. What does it mean?
3. What are the implications for improvement?

Based on the evaluation findings, create a set of recommendations:

- Change elements of the program to maximize impact
- Expand the program
- Eliminate elements of the program that were ineffective
- Lastly, share your evaluation results with key stakeholders and the community. This is a crucial step in the evaluation process.

Best Practices Section

Surveys

A survey is a tool to gather information from a large group of people and can be administered by mail, online, or in-person.

Below are some tips for creating a survey

- Always ensure you have informed consent from every participant. Participants should know that their participation is voluntary and confidential. They should know what the data will be used for and how it will be stored.
- Identify a target population and set an attainable goal.

- o It can be helpful to complete a needs assessment with the target population to gather information to create a goal.
- o When conducting a survey, it is important to have an overall end goal of what you would like to learn from the survey. If the goal is too big, the survey might not give you the answers you need.
- o For example, if you are looking to create a survey to gather information on quality child care, your questions need to be specific and informative to your overall goal. Your goal might be - "we want to understand the barriers families face when looking for quality child care" rather than "we want to understand the barriers families face when looking for quality child care, child care subsidies, and accessing services in the community."
- Choose how to administer the survey. Surveys can be administered by phone, online, in paper, or in person.
- Consider including a survey incentive. An incentive can increase the number of people willing to participate and show appreciation. For example, a coffee card provided to all participants for filling out a survey.
- Word questions concisely, be direct and specific.
  - o Do not make questions too long, or ask two questions in one question (double-barreled question).
  - o For example, the question below should be split into two separate questions because someone could be satisfied with one but not the other.
  - o How satisfied are you with your work environment and salary?
- Refrain from using absolutes. Absolutes such as "always" or "every" could skew the respondent's answer.
- Use a rating scale to get more detail. Using a scale can be helpful to get more detail than a simple yes or no. Ensure the scale has a balance of all answer possibilities.
- Don't put your opinion in the question.
- Make sure answer choices are mutually exclusive. Your answer choices must only include one set of information so a respondent can only choose one answer.
- Preview and test the survey. Preview and test the survey with members of target population to ensure that they're interpreting your questions in the way that you intend, then test the survey with colleagues before administering the survey to the rest of your target population.

Focus Groups

A focus group is a diverse group of people gathered together to discuss a particular topic. A facilitator leads the group through a series of questions and encourages participants to share thoughts and opinions.

Always ensure you have informed consent from every participant. Participants should know that their participation is voluntary and confidential. They should know what the data will be used for and how it will be stored.

Before

1. Identify the purpose, goals, and objectives.
2. Determine how many focus groups to hold for comparison.

3. Select an experienced facilitator to lead the focus group.
4. Find a location, set a time and date, determine how long the group will meet (1-2 hours depending on group size).
5. Identify and invite participants (6-12).
6. Ensure the participants are a representative sample of the population.
7. Prepare 4-5 open-ended questions that best relate to your goals and objectives.
8. Have a recording device, audio or video.
9. Practice questions with a test group.
10. Offer an incentive to show appreciation and encourage participation - gift card, dinner on site, money, etc.

During

1. Introduction and ice breaker (it usually takes 10-15 minutes for people to open up and engage in conversation).
2. Review the purpose and goals of the focus group.
3. Ensure all participants have an opportunity to speak, don't let one person dominate the conversation.
4. Avoid putting too much on the agenda, have a few questions to deep dive into a topic rather than multiple questions to skim the surface.
5. Keep questions short and straightforward.
6. Encourage the conversation between participants rather than have a Q and A with the facilitator.
7. The basics - have food and beverages, directions to the bathroom, clearly written name tags, clock, pen, and paper available.
8. Record the focus group.

After

1. Review recording multiple times.
2. Identify what themes emerge.
3. Have two or three other people follow steps one and two and discuss findings as a group.
4. De-identify the data to ensure participant's comments stay confidential.
5. Create a written summary.
6. Share information with the agency and participants.
7. Use data to inform decision making.

Key Informant Interviews

A key informant interview is a structured conversation with someone who has particular knowledge or expertise in a topic you wish to understand.

Always ensure you have informed consent from every participant. Participants should know that their participation is voluntary and confidential. They should know what the data will be used for and how it will be stored.

Before

1. What is your purpose? What do you want to know? Gather existing data and determine what new information is needed.

2. Identify the target population and key informants (people who have direct knowledge of the community and issues of interest).
3. Identify who will be the interviewer.
4. Determine how many interviews will be conducted – this is dependent on the situation, somewhere between 10-30 interviews will help create themes.
5. What interview method will you use? Phone, face to face, email, video call.
6. Structure – informal, semi-structured, standardized
7. Create an interview guide.

Interview Guide

1. Introduction – explain purpose, goals, and how the information will be used, confidentiality.
2. Questions – have five open-ended questions that allow the participant to reflect deeply on their comments. Start with factual questions, then move to questions that require an opinion, then questions about the future.
3. Probing questions – be prepared with follow up questions or reflections that will help participants expand on comments. If an answer is too vague ask for more detail.
4. Closing comments – leave time in the end for the participant to share any additional comments, thoughts, or recommendations.
5. Summary – summarize main points with the participants to ensure nothing was missed or stated incorrectly in the notes, discuss how findings will be shared.
6. End – thank the participant for their time, send follow up thank you letter.

During

1. Follow the interview guide you created.
2. Interviewer must maintain a neutral attitude.
3. Encourage the participant to talk in-depth about the question.
4. Take notes and have a tape recorder.
5. Be aware of any language differences and have a translator available if needed.

After

1. Review recording and notes.
2. Identify what themes emerge.
3. Have two or three other people follow steps one and two and discuss findings as a group.
4. Create a written summary.
5. Share information with the agency and participants.
6. Use data to inform decision making.

Empathy Interviews

An empathy interview is a specific interview technique used to gather insights that otherwise might not be apparent. The interviewer seeks to understand the feelings and experiences of others.

Always ensure you have informed consent from every participant. Participants should know that their participation is voluntary and confidential. They should know what the data will be used for and how it will be stored.

Why Conduct an Empathy Interview?

- Insight: To better understand the needs, values, and behaviors of stakeholders.
- Perspective: Gain a new perspective on the problem and possible solutions.
- Trust: Build trust with community members.
- Grounding: Integrate human needs into analysis and solutions, rather than only considering theories and data.

Before

1. Find a quiet, comfortable, and confidential place to hold the interview.
2. Clearly define the problem or question you are seeking to understand.
3. Gather perspectives from the people involved - stakeholders, agencies, clients, community.
4. Identify possible participants and contact them to participate.
5. Create an informed consent form regarding the reason for the interview and how the information will be used.
6. If possible, have a colleague accompany you to the interview to help take notes.
7. Create an interview template to guide your discussion.

During

1. Take detailed notes.
2. Introduce yourself (and colleague).
3. Introduce the project and reason for the interview
4. Build rapport - get to know the participant.
5. Evoke stories - ask the participant about their work, why they do the work they do, hopes, and challenges they face, support systems involved, etc.
6. Explore emotions - ask the participants to elaborate on the emotions that come up when they tell their stories.
7. Ask questions - ask participants to clarify statements or say more about a particular topic.
8. Closing question - Generally, a call to action question such as, "If you could change anything to better the situation, what would you do?" Or "If you could have support in solving the problem, what would that look like?
9. End the interview and thank the participant.

After

1. Summarize three key insights immediately after the interview.
2. Review notes and identify the participant's motivation, goals, successes, and limitations regarding the topic.
3. Group insights into themes (parts of the system, values, stakeholder area, or issue areas).
4. Create a short statement about each theme area that captures what is happening.
5. Email participants and stakeholders to share information.

Interview Tips

- Asking questions
  - Gain deeper understanding by asking the participant to clarify statements or ask the participant to say more about a topic
  - Encourage personal stories

- - - o   Don't provide answers to your questions
    - o   Ask about feelings and emotions
    - o   Ask open-ended and neutrally stated questions
  - Observing
    - o   Pay attention to non-verbal cues (active listening)
    - o   Look for inconsistencies in statements and ask questions
    - o   Focus on their needs, not providing solutions or your perspectives
    - o   Pay attention to your own reactions
  - Key Practices
    - o   Ask open-ended questions
    - o   Don't fill silences, allow the participant to sit with their thoughts
    - o   Focus on the participants needs, interests, and concerns, not creating solutions
    - o   Avoid leading questions
    - o   Ask why often to help clarify participant's statements

Sampling Methods

Data from sampling can be useful to gather information from a large number of people relatively quickly and affordably. A sample is a subset of a population.

Probability sampling: All participants in a target population have the same chance of being randomly selected.

Non-Probability sampling: Some participants in a target population may have a greater chance of being selected.

Using probability sampling allows the evaluator to generalize the findings to the larger population because the sample was randomly chosen, and all people had the same opportunity to be selected. Ideally, the sample will be a representation of the population. Using non-probability sampling does not always allow for the evaluator to generalize findings, but it will enable the researcher to gather themes and make educated guesses of what the sample group reported.

Probability Sampling

- Convenience Sampling: Selecting members of a population that are available at the current time or place. For example, surveying the first 20 people to walk out of the book store, or surveying the first 10 people to call into a service provider.
- Purposive Sampling: Selecting members of a population that are available at the current time or place. For example, surveying the first 20 people to walk out of the book store, or surveying the first 10 people to call into a service provider.
- Snowball Sampling: Participants are chosen by using referrals. Start by selecting a few participants then ask those participants to recommend someone else to be a part of the study. Best used when working with vulnerable or hard to find populations. For example, surveying a veteran about health care coverage then asking that veteran who else might be a good person to talk to.
- Self-selective Sampling: Participants are chosen by using referrals. Start by selecting a few participants then ask those participants to recommend someone else to be a part of the study.

Best used when working with vulnerable or hard to find populations. For example, surveying a veteran about health care coverage then asking that veteran who else might be a good person to talk to.

[Video Sampling Errors](#).

Sample Size

Sampling Vulnerable and Hard to Reach Populations

- A vulnerable population is a group of people that require greater care and protection than the average population and have additional protections when being considered research. Vulnerable populations may be unjustly influenced to participate in research, and much care should be taken to get informed consent from the participants.
- Hard to reach populations are difficult to reach due to their physical location and/or their social and economic situation.
- Strategies for sampling vulnerable populations:
    - Snowball sampling
    - Purposive sampling
    - Indigenous Field Worker Sampling – Training someone from the community to reach out to other vulnerable or hard to reach participants.
    - Time Location Sampling – Being at a location where vulnerable or hard to reach populations congregate.

Logic Model

A logic model is a diagram that shows the relationship between program activities and their intended effects. A logic model helps to identify what the current problem is, what resources and activities are available, or need to be implemented, and the intended outcome.

Logic models can help your group visualize and think through your efforts. They also play an important role in evaluation. There are many different formats for logic models, use what is best for your group. Outlined below are standard components in logic models.

[Community Tool Box Logic Model Resources](#)

[W.K Kellogg Foundation Logic Model Development Guide](#)

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