Breastfeeding in the Community: Setting Up Your Own Monitoring and Evaluation Plan

Background

In 2014, NACCHO, in partnership with the Centers for Disease Control and Prevention (CDC), Division of Nutrition, Physical Activity, and Obesity (DNPAO), implemented the Reducing Disparities in Breastfeeding through Peer and Professional Support program to increase breastfeeding rates among African American and underserved populations. Between January 2015 and June 2016, NACCHO supported implementation of 72 community-level peer and professional breastfeeding support programs at 69 local health departments, community-based organizations, and local hospitals in 32 states and territories. Grantees provided direct community-level breastfeeding support and enhancement activities, based on recommendations of the CDC Guide to Strategies to Support Breastfeeding Mothers and Babies.

Grantees provided individual services to pregnant women and new mothers (e.g., hospital visits, home visits, Baby Cafés) and hosted support groups. To support NACCHO monitoring and evaluation goals, grantees were required to document and report the number of one-on-one encounters, number of group sessions hosted, the number of women served for each type of service delivery and the race/ethnicity and age of the women. They also consistently provided qualitative feedback on the successes and challenges experienced in implementing the project. All data was reported to NACCHO on a monthly basis via Qualtrics®, an online survey and data collection software platform. Grantees reported encounter data, the number of mothers who achieved breastfeeding milestones (initiation, 3, 6, and 12 months for exclusive and any breastfeeding), and any implementation challenges or successes that were seen during the month.

During the course of the grant period, grantees provided over 92,800 one-on-one encounters to over 72,000 (duplicated) women. It was typical for one women to receive more than one individual encounter, thus the count for women served is for duplicated women. Over 3,300 groups were hosted for over 15,027 (duplicated) women. Almost half of all women served self-identified as African American.

addition, establishment or enhancement of 830 community partnerships, and implementation of 27 policy, system and environmental change solutions to shift systemic and structural barriers to breastfeeding in the community.

This brief describes steps to develop monitoring and evaluation plans for community-level breastfeeding programs and share lessons learned from NACCHO Breastfeeding Project evaluation.

Why evaluate?

Monitoring and evaluation are critical aspects of program service delivery. They are effective management tools during program implementation to ensure that the program is on track and producing intended results or outcomes. A monitoring and evaluation plan that identifies specific outcomes facilitates learning and is used to improve a strategy, initiative, or program. During the NACCHO Breastfeeding Project, grantees submitted monthly reports so that NACCHO could monitor the project, while the final report included feedback on monitoring, collected additional data, and provided early findings on community impact. Site visits were also conducted to monitor grantee projects.

Monitoring involves routinely tracking data that measures progress toward achieving objectives of a program or intervention. The purpose of monitoring includes ensuring activities are implemented according to plan and timeline, identifying activities or resource allocation in need of adjustment or improvement to achieve desired results, and providing information for decision-making and program evaluation.

Evaluation goes further, and includes analyzing data to measure how well a program met its objectives and/or the extent to which changes in outcomes can be attributed to the program. The purpose of evaluation is to confirm that adopted strategies and available funding produced the desired results, and to assist stakeholders in decision-making about future
improvement and implementation. Evaluation includes strengths and weakness, or facilitators and barriers, lessons learned, and suggested measures for improvement.

As shown in Figure 1, monitoring activities generally measure project inputs, processes or activities, and outputs. Evaluation activities usually measure indicators related to the effects or results of the inputs, processes, or outputs, and sometimes measure the long-term impact of these results. Program evaluation can be used to address three major questions:

1) Are we making a difference with this program;

2) What ingredients or aspects of our work are most critical to this difference; and

3) How do we know?

These questions are answered through the systematic collection of evidence to support conclusions and justifications about the effectiveness and efficiency of the program. Most program evaluations are implemented within a framework that specifies step-by-step activities to complete the evaluation. While there are numerous frameworks available, the NACCHO Evaluation Team for the Breastfeeding Project chose the CDC’s six-step framework\(^2\) on which to base evaluation activities, illustrated in the right-hand column. While the figure implies a sequential implementation, some steps can be accomplished simultaneously, especially the first three of engaging stakeholders, describing the program, and focusing the evaluation design.

Where and when do I begin?

Evaluation starts at the very beginning of the program – at its inception. During the program design phase, an evaluator should closely work with program staff to determine how proposed program activities will be evaluated to assess achievement toward program goals and objectives. Stakeholders including funders, community partners, program participants, and other interested parties with a vested interest in the program and its outcomes should also contribute to the design and evaluation of the program. Engagement of stakeholders at the early stages of program design and development is crucial for initial “buy-in” for both program implementation and evaluation.

Establishing new or enhancing existing partnerships with other community organizations was required of all

---

1. Intra Health International. Optimizing Performance and Quality. [https://www.intrahealth.org/opq/stages/stage-7/#stage-content](https://www.intrahealth.org/opq/stages/stage-7/#stage-content)

Breastfeeding Project grantees, and these partners were important stakeholders to the implementation of the projects within their communities. In the early stages of the program, it is important to gather stakeholders together to describe the program and focus the evaluation design. This ensures that all interested parties are on the same page, appropriately engaged, and will facilitate the use and dissemination of evaluation results at the end of the program. Partners may also provide the evaluation skillset that the implementation agency may lack. Other options are partnering with the local university to support evaluation plans, and also looking into community assets to find residents with the evaluation skillset needed to support the project.

Gathering data from outside sources, including partner organizations, is a common practice that can enhance the program’s overall evaluation. However, data collection systems are not always aligned among partners, so data may come in various formats, which may require some additional manipulation before it is usable. During the Breastfeeding Project, for instance, particularly with WIC partners, grantees experienced challenges to get clearance from the state to WIC agencies, so that data could be shared.

Each goal in your logic model should align with specific inputs and sources of data, strategies, and actions to be used to achieve the desired changes, and outputs that will indicate success.

Reducing Disparities in Breastfeeding through Peer and Professional Lactation Support Logic Model

STRATEGIES: (1) Provision of peer and professional lactation support services, expertise, and support; (2) Training of existing staff/volunteers in peer and professional lactation support; (3) Integration of lactation support services into existing community-level programs; (4) Connecting breastfeeding mothers to relevant support services and resources within communities; and (5) Provision of services, tools, and other resources that support community-specific culture, customs, and beliefs.

Describing the program:
the role of a logic model

A logic model is a one-page visual description of program inputs, activities, outputs, and expected outcomes for the program. It is helpful in communicating the program design among the stakeholders and others who have a vested interest in the program. The logic model helps to focus the program and the program evaluation.1 The NACCHO Breastfeeding Project team developed a logic model guide for the overall implementation of the initiative. The logic model is a living document that is updated whenever programmatic changes are made. Grantees were encouraged to develop their own site-specific logic models to guide them in program implementation and evaluation.

Partners may also provide the evaluation skillset that the implementation agency may lack. Other options are partnering with the local university to support evaluation plans, and also looking into community assets to find residents with the evaluation skillset needed to support the project. It is also important to built evaluation services into project budgeting and to discuss the possibility of evaluation technical assistance from the funding agency.

3 W.K. Kellogg Foundation Logic Model Development Guide
Breastfeeding in the Community: Setting Up Your Own Monitoring & Evaluation Plan

NACCHO’s Breastfeeding Team Logic Model

**INPUTS**
- Funding, guidance and support from CDC, DHHS
- NACCHO staff, T/TA, coaching
- National Partner Support (USBC & ASTHO)
- Breastfeeding Research & Programs (COC Guide to Breastfeeding Interventions)
- Consultants (evaluators, trainers, etc.)

**ACTIVITIES**
- Site Recruitment & Selection
- Regional Planning Meetings
- Training & Technical Assistance Needs Assessment
- Work Plan Development
- Resources & Support (funding, resources & materials, coaching)
- Training & T/A (distance and in-person)
- Process & Outcome Evaluation
- Community Engagement & Interaction
- National Partner Meetings & Coordination
- Breastfeeding Community of Practice

**OUTPUTS**
- LH/H/O Work Plans
- Community-level peer and professional lactation support
- RFA Process
- Breastfeeding Support T/TA Assessment
- T/TA Plans, Materials and Resources
- Breastfeeding Community of Practice
- Evaluation Plan and Report

**SHORT TERM OUTCOMES**
- Increased # of LURs and CSOs that provide peer and professional lactation services, expertise, and support
- Increased # of African American and underserved women reached in early post-partum period (birth to 2 months)
- Increased # of African American and underserved breastfeeding mothers in the early post-partum period
- Increased # of access points (community, hospital, clinic, workplace) that promote and reinforce breastfeeding behaviors and practices across the life span related to breastfeeding

**INTERMEDIATE & LONG TERM OUTCOMES**
- Increased breastfeeding initiation, duration, and exclusivity
- Improved prevention and control of overweight and obesity

A Local Health Department Grantee Logic Model

**Inputs**
- County Health Department
- State Health Department
- Physician Champions
- Healthy Start
- Healthy Future for All Coalition
- Engaged and Informed Hospital Administration
- Best Practices/Existing tool kits

**Strategies/Activities**
- Hospital strategies to increase breastfeeding at discharge
- Primary care provider strategies to encourage and support breastfeeding
- Employer strategies to provide lactation space and implement policy

**Outputs**
- # of hospitals that have joined NYS BOH, Great Beginnings NY or Latch on NYC
- # of primary care practices that are designated as NYS Breastfeeding Friendly
- # of employers that have implemented breastfeeding friendly policy/programs
- # and demographics of women reached by breastfeeding policies and practices

**Outcomes**
- % of infants exclusively breastfed during birth hospitalization
- % of infants breastfed at 2, 4, and 6 month well visits
- % of new moms returning to work in each participating workplace who breastfeeds
- % of young children who are overweight or obese

Image source: Erie County Health Department (NY)
Focusing the evaluation design

The needs of stakeholders vary, depending on their role and involvement in the program. A good evaluation plan should be designed to accommodate those needs, while maintaining fidelity to the overall evaluation. Input from stakeholders is critical at this juncture to make sure that all voices are heard.

In focusing the evaluation design, it is a good idea at this stage to re-visit program goals, objectives, activities, and outcomes that will be monitored and evaluated. A discussion among stakeholders to answer the following questions will also help focus the evaluation design:

- ✔ What will be evaluated? That is, what is “the program” and in what context does it exist?
- ✔ What aspects of the program will be considered when judging change/performance?
- ✔ What standards (i.e., type or level of performance/change) must be reached for the program to be considered successful?
- ✔ What data source(s) will be used to indicate how the program has performed?
- ✔ What conclusions about program performance are justified when the available evidence is compared to the selected standards?
- ✔ How will the lessons learned from the evaluation be used to improve public health effectiveness?

A monitoring and evaluation plan provides guidance and structure as the evaluation is implemented. Critical components of an evaluation plan include:

- Evaluation questions to answer,
- Performance indicators to use,
- Essential information/data to collect,
- Data collection methods,
- Available data,
- Format of the data,
- Who is responsible for collecting each type of data, and
- How the data will be used.

Gather credible evidence

Gathering evidence to support your program’s progress towards goals and objectives is a significant component of program implementation. Without evidence, the success and outcomes of the program remain unknown. Evidence is necessary to justify the existence of the program, to provide lessons learned from the implementation, and to offer suggestions for improvement for the next iteration of the program.

After the program and evaluation design have been focused — with outcome indicators and data sources defined — it is time to gather the evidence to support your program’s progress and success. Notice how the word “evidence” is used rather than data. This is done to emphasize the point that not all evidence to support the progress or success of the program needs to be numerical or quantitative. Qualitative evidence can also be used to document program progress and success. For example, interviews with key informant stakeholders or focus groups with program participants are rich sources of information that will help you document the outcomes of the program.

Some of the data, whether quantitative or qualitative, can be collected from previously established sources, such as program administrative records, or other outside sources such as national databases. (See NACCHO’s The Use of Community Needs Assessment to Inform Breastfeeding Services for reliable data source recommendations.)

Primary data collection for both quantitative and qualitative measures occurs when data is collected directly from program participants, and where this data does not exist elsewhere. Any new data collection efforts should be based on your program’s needs and resources, and also take into consideration the burden on participants and program staff. Survey fatigue can occur quickly when participants are constantly bombarded with requests for data, whether those requests are minimal, or long and complicated. Fatigue affects the willingness of participants to respond, resulting in less-than-optimal response rates and ability to draw conclusions from the data.

Various tools or instruments may need to be developed to assist in collecting the evidence. For example, surveys or questionnaires are good instruments to collect information from a large number of individuals. Written scripts for individual interviews or focus groups are used to ensure that the same information is gathered from one individual to another, or from one group of individuals to another respectively. While templates for many data collection tools

---

exist, they almost always need to be modified to fit the needs of the program being evaluated, since each evaluation is uniquely tailored to the needs of the program and evaluation questions to be answered.

Despite best efforts to make data reporting forms and submission processes as clear and easy to use as possible, staff who are collecting data will need to be trained on how to use and comply with new procedures. During the Breastfeeding Project, training was provided at the grantee kick-off meetings for project leads (i.e., train-the-trainer), who would then return to their sites and train others on their team. Many sites reported that obtaining staff buy-in, whether it was professional staff such as nurses or volunteer staff such as peers, required coaching and training to ensure that data was recorded in an ongoing fashion as soon as services were delivered.

Ideally, the data or evidence collected to support program progress is perfectly matched to performance indicators. However, program evaluation occurs in real-life scenarios, and a one-to-one matchup is not always feasible. Flexibility in data collection is often a necessity. If the project’s funder requires specific data to be collected, then grantees may need to adjust their measures. However, if there are no external requirements, collecting data at different breastfeeding milestones can be just as valid. As long as data is collected systematically and objectively to measure progress along the way and these measures are agreed upon by the program’s stakeholders, non-traditional measures can also be used to assess program progress and effectiveness.

**Lessons learned from NACCHO grantees’ projects data collection**

Many grantee organizations had never collected demographic data such as age or race/ethnicity of women served, especially when providing support groups for women. It was initially feared that women might not be comfortable sharing this personal information with the organization. With coaching from NACCHO staff, most organizations overcame that challenge and could provide the requested data. A few exceptions occurred; in particular, for an organization that worked with women who also received services from a women’s shelter and group home. In this case, gathering of personal information was waived in order to provide much-needed breastfeeding services instead. Lessons learned from data collection revealed that it is important to make the process as easy as possible and that it flows with the services provided. Recording breastfeeding milestone data was at times difficult, depending on how grantee staff interacted and formed a relationship with breastfeeding families. Sometimes data collection needed to be put aside so that other urgent issues could be addressed during the encounter. Overall, it was important to realize that a balance needed to be struck between data collection and spending time on implementing strategies and providing service.

Finally, it is important that the data to be collected is realistically obtainable. Securing follow-up data proved to be a challenge for some Breastfeeding Project grantees. If demographic data was not captured during individual or group sessions, grantee staff made a good-faith effort to contact participants primarily through telephone follow-up calls. In some areas, this was a challenge due to incorrect telephone numbers or no telephone service at all, especially in rural, remote areas. This was also true for collecting follow-up data on breastfeeding milestones. Many grantees did not have the required staff time to allocate to the sheer number of participants that needed follow-up.

Another area where realistic considerations are necessary is in measuring long-term or proximal outcome measures. Many of the Breastfeeding Project grantees wanted to change overall breastfeeding rates within their communities and within the relatively short time frame of this project. However, distal or long-term outcomes such as breastfeeding rates are difficult to measure for a few reasons. First, it takes a long time for the rate to change, and many programs are not funded for long-enough periods to collect data, which would track those changes. Secondly, cause-and-effect relationships between activities and distal outcomes are difficult to establish. Other naturally occurring factors can happen in between, so it is difficult to prove that a single activity caused something happening years later. In setting up your own program evaluations, make sure that you have identified some short-term and perhaps intermediate outcomes to track, so that you have easy “wins” and can demonstrate program effectiveness within your project timeframe.

**Justify conclusions**

How to analyze or make sense of the data or evidence is often a barrier for staff who are evaluating a program. Many are often under the misconception that complex statistical analysis performed with sophisticated software is necessary before conclusions can be formed. This is not necessarily the case. Typically, simple statistics such as averages (i.e., mean, median), or percentages of phenomenon occurring or not occurring are sufficient to demonstrate program success.
However, any analytical approach should be driven by the evaluation questions to be answered, the type of data collected, and the audience for the evaluation findings. Re-engaging stakeholders at this stage is a very good idea, since they can help to interpret and draw conclusions from the data.

Ensure use and share lessons learned

After the hard work of data collection and analysis, it is important to share the results widely among stakeholders and other interested parties. Common methods of results dissemination include a written program report with its findings, one-page program results, summaries, infographics, peer-reviewed journal articles, oral or poster presentations at national conferences, webinars, blog posts, and podcasts. Many of these types of dissemination include data visualization, or graphics, which can add to the appeal of the dissemination method.

It is critical that program results are not only analyzed, but that lessons learned are incorporated into the program’s next iteration. This should be a part of every quality improvement cycle, to enhance and perfect program implementation on an ongoing basis. Perhaps the ultimate success of the Breastfeeding Project was that many grantees now use data and evidence-based information to inform their future programs, their partner programs in the community, and their communities at large. Many sites conducted a needs assessment in their communities to inform the services they would offer during the Breastfeeding Project. Although all grantees were required to provide direct services to pregnant and breastfeeding women, some offered wrap-around services or formed strategic partnerships with other community organizations to address other needs of the clients, based on results from the needs assessments. Grantees widely shared the needs assessment results with a range of partners, such as home visiting agencies and State Title V offices. The use of data will continue to allow agencies to make decisions based on evidence from the community as to how best serve and meet community members’ needs.

Conclusions and recommendations

Program evaluation is a critical aspect of service delivery to monitor and ensure that activities are aligned with program goals and objectives. It is also vital that outcomes produced by the program are what was intended and produced results that improve the lives of program participants and others who might also be affected by the program.

Lessons learned by grantees through the Breastfeeding Project regarding program evaluation include the following:

- Evaluation is an important aspect of service delivery, and time and resources need to be specifically devoted to this activity.
- Community partners can provide data for evaluation purposes. However, this data does need to be reviewed for quality and completeness prior to analysis.
- Gathering data is more challenging than it seems on the surface. Some challenges to consider up front are:
  - Being realistic in what data can be collected during a client encounter. Flexibility is necessary to ensure that a balance is struck between data collection and service delivery so that client needs are met.
  - Non-traditional measures can be used as long as the measures are objectively defined, systematically collected, and relate to performance indicators. Creativity and thinking outside the box may be necessary to align data with program requirements and real-world restrictions.
  - Data instruments are necessary to record and capture data in a systematic fashion. While templates exist, instruments almost always need some fine-tuning in order to ensure usability for the task at hand.
  - Training staff to collect data and use the instruments are critical steps to ensure buy-in and accuracy.
  - Long-term measures and outcomes are problematic to establish, because of intervening events which may cause difficulty in showing cause-and-effect relationships.
- Data analysis does not necessarily need to be overly complex. Simple descriptive statistics may suffice. For complex analysis, consultation with experts in data analysis may be required.
- Dissemination of results should happen on a prolific basis at the end of the project. Non-traditional dissemination efforts, including one-page summaries, infographics, and oral and poster presentations should be considered, as well as the traditional written report.
- Results and lessons learned from the project must be incorporated into the next iteration of the program for continuous quality improvement efforts.
## Additional Monitoring & Evaluation Resources

<table>
<thead>
<tr>
<th>RESOURCE</th>
<th>DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>CDC Evaluation Framework</strong>&lt;br&gt;<a href="https://www.cdc.gov/eval/framework/index.htm">https://www.cdc.gov/eval/framework/index.htm</a></td>
<td>CDC suggests following this framework for public health program evaluation.</td>
</tr>
<tr>
<td><strong>CDC Evaluation Resources</strong>&lt;br&gt;<a href="http://www.cdc.gov/dhdsp/evaluation_resources.htm">http://www.cdc.gov/dhdsp/evaluation_resources.htm</a></td>
<td>This CDC webpage contains many online resources that can be used to develop an evaluation plan, including sample evaluation plans, workbooks, and toolkits.</td>
</tr>
<tr>
<td><strong>Developing an Effective Evaluation Plan: Setting the Course for Effective Program Evaluation</strong>&lt;br&gt;<a href="http://www.cdc.gov/obesity/downloads/cdc-evaluation-workbook-508.pdf">http://www.cdc.gov/obesity/downloads/cdc-evaluation-workbook-508.pdf</a></td>
<td>This CDC workbook can help public health program managers, administrators, and evaluators develop a joint understanding of what constitutes an evaluation plan, why it is important, and how to develop an effective plan.</td>
</tr>
<tr>
<td><strong>CDC Guide to Developing Logic Models</strong>&lt;br&gt;<a href="https://www.cdc.gov/dhdsp/programs/spha/evaluation_guides/logic_model.htm">https://www.cdc.gov/dhdsp/programs/spha/evaluation_guides/logic_model.htm</a></td>
<td>This CDC Evaluation Guide offers a general overview of the development and use of logic models as planning and evaluation tools. A feedback page is provided at the end of this guide.</td>
</tr>
</tbody>
</table>

## Acknowledgments

This publication was made possible through the support from the Centers for Disease Control and Prevention, Cooperative Agreement ##U38OT000172. NACCHO is grateful for this support. Its contents are solely the views of the authors and do not necessarily represent the official views of the sponsor.

## About NACCHO

The National Association of County and City Health Officials is the voice of more than 3,000 local health departments across the country. These city, county, metropolitan, district, and tribal departments work every day to ensure the safety of the water we drink, the food we eat, and the air we breathe.

For more information, please contact:

**NACCHO Breastfeeding Team**
breastfeeding@naccho.org

---

The mission of the National Association of County and City Health Officials (NACCHO) is to improve the health of communities by strengthening and advocating for local health departments.

1201 Eye Street, NW  4th Floor  Washington, DC  20005  
P 202-783-5550  F 202-783-1583  
© 2018, National Association of County and City Health Officials