

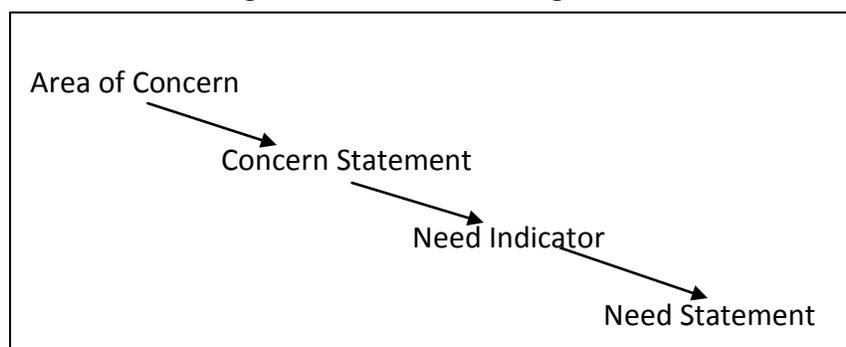
Section I: Analyzing Data and Writing Need Statements

Step 3: Gather and Analyze Data		
Activities	Recommended Tasks	Highly Recommended
Analyze data and write Need Statements	<ul style="list-style-type: none"> NAC analyzes data and articulates gap between “what is” and “what should be” NAC ensures that each Need Statement links to Goal Area or Area of Concern NAC determines prioritization of Need Statements 	Each Need Statement: <ul style="list-style-type: none"> Derived from a participatory process Considers the magnitude of the gap

Once the data collection for the Comprehensive Needs Assessment (CNA) is completed, the Needs Assessment Committee (NAC) should review the data. What should occur in the review of the data is a conversation that is focused on a specific set of needs that were identified as concerns early in the planning process and are now confirmed by the data.

Note in Figure I.1 the connection of all parts of the CNA planning process.

Figure I.1 CNA Process Alignment



I.1 Preparing the Data for Analysis

Making sure the data are complete and valid is known as "cleaning" the data. It should be reviewed for inconsistencies and errors. We strongly recommend that this be done by the data leader or a data expert before it is submitted for review by the NAC or other stakeholders.

The data should be prepared for review and analysis in a way that is easy to understand and features significant points clearly. We recommend that the data be presented

- In charts and graphs and
- In short summaries related to each Need Indicator.

I.2 Data Analysis Challenges

Despite best intentions, data will be incomplete and partial. Nevertheless, with an understanding of the limitations and challenges, the NAC will be able to get the most from the data and make recommendations for instances where further data are required to substantiate a need.

Some of the challenges in analyzing data are:

- **Sampling bias:** The sample is skewed and making inferences is too problematic. For example, the parent survey was administered only to highly involved parents.
- **Unclear constructs:** The issue being captured on the survey was not clear enough. For example, the team tried to measure how “connected” students felt to their schools, but the meaning of “connected” was too vague and included too many factors (e.g., participation in campus sports, engagement in clubs, sense of affiliation and identity, along with questions about self-efficacy).
- **Inference error and circular reasoning:** The leap in logic between the data and the original concern is too great. For example, the NAC was concerned that migrant students were not getting sufficient academic support outside the class in Algebra I. When the data team considered all the forms of support that were offered and took into account that local programs did not have a uniform way of reporting this kind of support, it looked at a proxy that could serve as a substitute for this missing data. The failing rate for migrant students in Algebra I was taken to be the percent of migrant students who did not receive sufficient support in Algebra I. Although this might seem plausible, this confuses processes (tutoring, homework clubs, mentoring) with outcomes (passing rates).

If you encounter any of the above problems, you may want to either look at existing data sources for additional data that may help you resolve some of these issues or, if possible, quickly administer some short surveys or conduct focus groups (by phone or electronically) to obtain any additional data in a timely way that you need to address these issues.

I.3 Conducting a Participatory Data Review and Analysis Process

The data review and analysis process is one that calls for expert judgment, a range of perspectives, and healthy debate. We recommend that you reconvene the NAC for this discussion. We suggest that the data leader should be an instrumental part of the meeting, presenting an overview of the data, answering questions, and leading the analysis.

After the NAC has become familiar with the data, the following questions should be discussed:

- Do the data make sense?
- Are there sufficient data to validate the needs of migrant students? Of PFS students?
- Do the data relate to the Need Indicators?

Group processes, such as those included in Appendix F.2, *Instructions for Conducting Group Activities* will keep NAC members engaged and ensure that all perspectives are voiced.

Appendix I.1 *Sample Agenda for NAC Meeting to Review and Analyze Data* is a sample agenda for a meeting to guide the NAC through the process of reviewing and analyzing the data.

I.4 Writing Need Statements

A recommended framework for analyzing the data is to develop Need Statements, which provide a means of summarizing the outcomes of the data collection and relating them to the concerns expressed early in the process. Need Statements are intended to specify actual, data-supported gaps that have been found between “what is” and “what should be.”

To assist in writing the Need Statements, the following steps may be helpful.

- Describe the need, so that there is clarity and the interpretation is easily understood.
 - Use the data to state concretely the gap between “what is” and “what should be.”
- Specify the comparison standard.
 - To what groups are migrant students (or a subgroup of migrant students) compared?
- Specify the current migrant student status, and particularly that of PFS students.
 - What do the data show?
- Explicitly state the gap between the status of the comparison group and migrant students, and specifically PFS students.

Example One. The following example will illustrate moving from the Concern Statements and Need Indicators to Need Statements, based on the data analysis.

Goal Area: Math Achievement

Concern Statement: We are concerned that eighth grade migrant students have a high rate of school failure in eighth grade math.

Need Indicator: Percentage of migrant students who successfully complete Algebra I with a C grade or better in the 8th grade

Data Source: State assessment data from 2011-2012

Comparison Group (or Target): All students enrolled in Algebra I who took the state assessment

Summary of Data Findings: The data show that 35% of migrant students (27% PFS) who were enrolled in Algebra I as eighth graders successfully completed Algebra I as compared to 64% of all other students who were enrolled in Algebra I as eighth graders during the same time period.

Developing the Need Statement: The difference—or gap—is 29% for migrant students in general, and 37% for PFS students. The “what should be” is based on the comparison group of all other students. In other words, the goal is to bring migrant students up to a level on par with general trends of student performance of non-migrant students. Note how the Need Statement in the table below defines the need in a measurable way.

Table I.1 Example 1

What Is	What Should Be
Only 35% of migrant 8 th graders enrolled in Algebra I successfully completed the course with a C or better.	At least 64% of migrant 8 th graders enrolled in Algebra I should successfully complete the course with a C or better.
Need Statement	
An additional 29% of migrant students (37% of PFS students) enrolled in Algebra I need to successfully complete the course with a C or better.	

Example Two. Note that not all needs have to be expressed in terms of academic achievement or results on other types of assessments. The Concern Statement written in Example 2 may be one of several that addresses concerns over school readiness. Other Concern Statements might lead to examining data on the gap between how well young migrant students perform on a preliteracy test in comparison to other children. However, the Concern Statement below appears to be the result of a discussion of possible root causes of preschool migratory children

not being ready for school. This concern might be one of several factors discussed by the NAC to get to the root of why young migrant children are not prepared to enroll in school.

Goal Area: School Readiness

Concern Statement: We are concerned that parents of young migrant children do not read picture books to their children on a regular basis.

Need Indicator: Percentage of migrant parents with children ages 0-4 who report reading picture books to their children at least three times per week.

Data Source: Question 3 on Parent Survey

Comparison Group (or Target): Given the research on the importance of reading to young children, we believe that at least 95% of all migrant parents should read picture books to their preschool-aged children on a regular basis.

Summary of Data Findings: Of the 75 parents with children ages 0-4 who responded to the Parent Survey administered by local recruiters from 6 local migrant programs across the state, 36 (48%) reported that they read picture books to their children at least three times a week.

Developing the Need Statement: The difference—or gap— is 47% between what the migrant parents reported and what the target percentage is for parents to read to their children. Note that there was no comparison group for this data; therefore, the alternative was to establish a target for the “what should be.” This type of target can be based on research, what we know of common practice, or what expectation the NAC would like to set. By setting a target, you have a measurable way to articulate the gap between “what is” and “what should be.”

Table 1.2 Example 2

What Is	What Should Be
48% of migrant parents with children ages 0-4 who responded to a survey reported that they read picture books to their children at least three times a week.	95% of migrant parents with children ages 0-4 should read picture books to their children at least three times a week.
Need Statement	
An additional 47% of migrant parents with children ages 0-4 need to read picture books to their children at least three times a week.	

The NAC writes Need Statements for all the Need Indicators. Appendix I.2 *Template for Developing Need Statement* provides a template for NAC members to complete that will help them develop Need Statements. We suggest that the whole group review each Need Statement by addressing the follow two questions:

- Does the Need Statement capture the need represented in the data and provide a clear statement of improvements sought based on data?
- Will the Need Statement demonstrate to outside parties the critical nature of the need (the “What Is”)?

I.5 Prioritizing Need Statements

Once the Need Statements have been written, we recommend that the NAC prioritize them based on the following factors:

- Magnitude in the gaps between “what is” and “what should be”
- Critical nature of the need
- Special needs of PFS students
- Degree of difficulty in addressing the need
- Risks/consequences of ignoring the need
- External factors such as state and district priorities and goals

We suggest that you develop a written summary that lists the needs organized by priority along with the rationale for their ranking.

Considerations for small states We suggest that small states with limited staff and resources maintain the participatory nature of the process of developing Need Statements. State directors are encouraged to review the data with the data leader and one or two Federal programs staff, the MEP evaluator, and a local or regional MEP administrator. This meeting can be accomplished face-to-face or by conference call or virtual online meeting.

- Members of this group could develop the Need Statements on their own and then reconvene by conference call or virtual online meeting to discuss and prioritize the Need Statements.
- In conjunction with the data leader, you could develop a draft of the Need Statements for the group’s or individual stakeholder’s review.

I.6 Archiving Information for the CNA

We recommend that you include the following information in your records and archives:

- Data summaries
- NAC meeting agenda and attendance

- Meeting proceedings or notes (and notes from phone conversations), capturing especially any discussion of Need Indicators that remain unconfirmed due to a lack of available data
- Worksheets for developing each Need Statement
- List of prioritized needs
- Written recommendations on the prioritizing of needs, with criteria and explanation for prioritization

I.7 Manager’s Checklist and Reflection

Here are some key accomplishments for *Section I: Analyzing Data and Writing Need Statements*. Take a moment to jot down your progress on the items below. Also, note any issues or challenges.

Manager’s Checklist

- Data analysis confirmed that
 - Data seem reasonable and appropriate
 - Data are sufficient to determine the needs of migrant students and PFS students
 - Data substantiate the perceived need
- Need Statements
 - Represent data that relate to the initial concern
 - Reflect gap analysis (the difference between “what is” and “what should be”)
 - Illustrate the critical nature of the need
 - Are prioritized based on
 - Magnitude in the gaps
 - Special needs of PFS students
 - Critical nature of the need
 - Degree of difficulty in addressing the need
 - Risks/consequences of ignoring the need
 - External factors such as state and district priorities and goals

Reflection

1. How will you continue to strengthen your understanding of and data about migrant student needs?
2. Were there ways in which data systems were strengthened as a result of the process?
3. If particular concerns were tabled for lack of available data, what strategies can be put into place for getting at that information in future?

I.8 Resources and Tools in Appendix I

Appendix I.1 Sample Agenda for NAC Meeting to Review and Analyze Data

Appendix I.2 Template for Developing a Need Statement

**COMPREHENSIVE NEEDS ASSESSMENT
NEEDS ASSESSMENT COMMITTEE MEETING 3
STATE DEPARTMENT OF EDUCATION**

APRIL XX, 2012

Meeting Purpose: To analyze data collected for the Comprehensive Needs Assessment and develop and prioritize Need Statements

9:00 Overview and Purpose of the Meeting

- Explanation of how Needs Statements fit into the overall CNA process

9:15 Presentation of Data Collected

- Data leader will present summary of the data organized by Need Indicators
- Facilitator will conduct whole group discussion on the following questions
 - Do the data make sense?
 - Are there sufficient data to validate the needs of migrant students? Of PFS students?
 - Do the data relate to the Need Indicators?

10:30 Break

10:45 Instruction and Practice Developing Need Indicators

- Group Activity: Provide instruction and examples from the *Toolkit (1.4 Writing Need Statements)*. Have small groups work together to practice developing Need Indicators; process with whole group, discuss challenges, clarify the task.

11:15 Convene Small Groups to Develop Need Statements

- Provide members of each work group summary sheets for each Need Indicator pertaining to a goal area or topic, completed through the Summary of Data Findings (Use *Appendix I.2 Template for Developing a Need Statement* in; these will be prepared before the meeting.) Chart paper will be provided to complete the “what is,” “what should be,” and “need statement” for each Need Indicator. Each small group will discuss the data summary and develop a Need Statement for each concern and Need Indicator, if they determine that there is sufficient data to validate the Concern Statement.

12:15 Lunch

1:15 Review of Need Statements

- Each small group presents Need Statements and identifies any concerns it felt was not validated by data, NAC members comment.

2:30 Break

2:45 Prioritize Need Statements

- Facilitator provides criteria for prioritizing Need Statements (See p. I-6 in the *Toolkit*.) and asks if these feel “right” or if there are other criteria to consider. Group agrees on criteria.
- Need Statements on chart paper posted around the room; NAC members provided 10 sticky dots to place by Need Statements they rate as highest priority.

3:15 Review of Prioritized Need Statements

- Facilitator conducts discussion of rankings of Need Statements by noting the top 10 and asking:
 - Are there any concerns that should be saved for a future CNA?
 - Are there any low ranking concerns that can be grouped with those on a similar topic?
 - Are there any Need Statements that should be revised or made clearer?
 - Do the highest ranked Need Statements provide a good foundation for exploring solutions?

4:00 Next Steps and Adjourn

Appendix I.2 Template for Developing a Need Statement

Goal Area:

Concern Statement:

Need Indicator:

Comparison Group (or Target):

Data Source:

Summary of Data Findings:

What Is	What Should Be
Need Statement	