Availability of data on nutrition intervention coverage in West Africa:

*Technical Note*

Prepared by Transform Nutrition West Africa, with support from the Bill & Melinda Gates Foundation

Summary

*Transform Nutrition West Africa* is a regional initiative to support effective policy and programmatic action on nutrition through evidence generation, synthesis, and mobilization.

Intervention coverage data is essential for tracking the implementation and impact of strategies and investments to reduce malnutrition. This technical note provides the methodological details of the assessment of a country’s potential to report on national-level coverage for a set of 16 key nutrition interventions in West Africa. Interventions were prioritized by regional stakeholders. We reviewed the availability of coverage data for 16 nutrition interventions grouped along the maternal, newborn, child, adolescent continuum of care. Data were reviewed and key actions recommended to strengthen coverage measurement. Results are presented in individual country data profiles, and a detailed database is available for download.

1. OBJECTIVE

The overall aim of the assessment was to describe and assess a country’s potential to report on national-level coverage for a set of prioritized interventions by lifecycle stage. Specifically, the assessment aimed to:

- Identify a set of priority nutrition interventions and related coverage indicators relevant to the West Africa region;
• Identify all available primary data sources – including administrative and population-based data sources - for this set of nutrition intervention coverage indicators in each WA country;
• Identify and assess a countries’ potential to track progress and report coverage of key interventions using the data available;
• Identify gaps and opportunities in availability of data on intervention coverage to track progress, monitor and evaluate nutrition programs;
• Recommend key actions to strengthen national-level coverage measurement.

2. METHODOLOGY

The term coverage used throughout the protocol is defined as the proportion of individuals in need of a service or intervention who actually receive that service (Marsh et al. 2020). Coverage indicators are calculated by dividing the number of people receiving a defined intervention by the population eligible for, or in need of the intervention.

2.1. Identification of priority interventions and related coverage indicators

A stepwise approach, described below, was followed to identify priority interventions and coverage indicators.

**Step 1: Mapping all prioritized nutrition interventions across regional and global level**

Identification and mapping of priority nutrition interventions was done at regional and global level. Interventions identified at each level were brought together into one excel sheet and organized by the lifecycle stages, including adolescence, preconception, pregnancy, delivery and postnatal period, childhood, and household level (general). This resulted in 84 interventions. We aimed to be inclusive at this stage, so interventions were repeated across different stages.

*Global-level priorities (and other contexts):*

- We identified extracted priority nutrition interventions through a targeted literature search. This included assessment of the work on coverage indicators done by March et al. 2020; Gillespie et al. 2019; the Global Nutrition Monitoring Framework; the POSHAN Nutrition Indicator Framework; the global investment framework; and the Lancet Series.

*Regional-level priorities:*

- We performed a review of regional priorities as identified during TNWA’s inception phase;
- We reviewed the two regional nutrition policies included in a previously conducted regional policy review, i.e., the WAHO Regional Nutrition Strategic Plan for West Africa and the Feuille de Route Régionale pour l’Alliance Globale pour la Résilience Sahel et Afrique de l’Ouest.

**Step 2: Consultation with regional stakeholders**
The final list of 84 interventions was then shared among nutrition stakeholders working at regional level to seek their input on top priority interventions to be implemented across the region. Stakeholders consulted included DataDENT - a project focused on improving value chains for nutrition globally with focus countries in West Africa - and the West Africa Regional Nutrition Working Group (including various nutrition stakeholders active in the region). We requested each stakeholder to review the list of interventions and add any they felt were missing, then rank their top ten priority interventions from 1 to 10, with 10 representing the highest priority. We then compiled scores from all stakeholders weighed by ranking and retained any intervention with a score >9 (including all but the lowest quintile: range of scores (0-50)).

**Step 3: Final selection of nutrition interventions**

The final selection of nutrition interventions was based on the following inclusion criteria: any intervention that was i) ranked and selected by regional stakeholders with a combined score >9 AND ii) was included in the Gillespie et al. (2019) paper, which is the reference used to identify evidence-based interventions (proven impact on reducing undernutrition in women and children). From the long list of 84 interventions, we finalized a list of 16 key nutrition interventions for the region.

**Step 4: Identification of potential coverage indicators for the final selected interventions.**

For each of the 16 key interventions we mapped proposed coverage indicators from the Gillespie et al. paper (proposed core coverage indicator list), which was complemented with i) the DataDENT compendium of indicators (guidance document for measuring coverage of health systems nutrition interventions in household surveys) (DataDENT 2021), and ii) other relevant literature on coverage indicators including Choufani et al. (2020), which discusses different ways to measure coverage for IYCF counselling, and Moller et al. (2018), a scoping review of maternal and newborn indicators. For any given intervention, multiple coverage indicators could be available. This exercise served the purpose to be inclusive and guide identification of the various ways an indicator and its measurement (numerator/denominator) could be presented. Based on the resulting map we defined common terms to guide the search for the data sources as different definitions and terminology aspects are used.
2.2 Identification of data sources at country level for measurement of coverage of the selected interventions

We systematically reviewed the available primary data that report on the final prioritized set of nutrition interventions and their coverage indicators for all WA countries. We identified current data sources, population-based and/or administrative data (facility-based), that report coverage of these interventions.

Search strategy

Primary data sources are defined as an original data source, i.e., data are collected first-hand for a specific research purpose or project. Sources may include population-based survey data or administrative data. Searches were completed between July-December 2020; any data sources available after this date were not included in this exercise.

The following complementary search approaches were used to identify nutrition data sources at country level (Table 1):

Table 1. Search strategy

<table>
<thead>
<tr>
<th>Search approach</th>
<th>Population-based surveys</th>
<th>Administrative data</th>
</tr>
</thead>
<tbody>
<tr>
<td>TNWA - Review data country profiles on nutrition data assessment</td>
<td>We used previously produced data country profiles to explore the included population-based surveys for any of the West African (WA) countries for the key interventions and their coverage indicators.</td>
<td>NA</td>
</tr>
<tr>
<td>TNWA - Review of national policy documents</td>
<td>We explored the policy review for each WA country to see if there is mention of interventions/coverage indicators they use and/or the data sources they mention.</td>
<td>NA</td>
</tr>
<tr>
<td>Targeted website searches</td>
<td>We explored <a href="http://ghdx.healthdata.org">ghdx.healthdata.org</a> and <a href="http://microdata.worldbank.org">microdata.worldbank.org</a> to find relevant surveys for each WA country. We used key words for intervention/indicators as identified from the mapping exercise to retrieve sources. No limitations on the type of study, nor on timeframe were applied.</td>
<td>NA</td>
</tr>
<tr>
<td>Google search</td>
<td>We searched keywords in English for all countries and the French translation for francophone countries (Benin, Burkina Faso, Guinea, Ivory Coast, Mali, Mauritania, Niger, Senegal, Togo). [search terms for indicator] + [country] + [administrative] OR [population-based]</td>
<td>NA</td>
</tr>
<tr>
<td></td>
<td>We then screened title/abstract of the first 50 hits.</td>
<td>NA</td>
</tr>
<tr>
<td>Consultation with content experts</td>
<td>Country experts (e.g., NIPN, national statistics office/bureau, nutrition experts) were contacted and presented with the databases retrieved. A request for their input was sent.</td>
<td>Request for input was sent to UNICEF and WAHO DHIS2</td>
</tr>
</tbody>
</table>
The inclusion criteria for retaining the primary data sources are described in **Table 2**.

**Table 2. Inclusion criteria**

<table>
<thead>
<tr>
<th>Data source type</th>
<th>Inclusion criteria</th>
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| Population based surveys| • A nationally representative survey (if no national survey was available for a given indicator, a sub national survey was documented) (we only considered population-based data from surveys and other resources that are administered on a large scale (national level))  
• Includes at least one measurement of coverage or the components (numerator (those individuals that are in need of the intervention that received it)/denominator (all individuals in need of the intervention)) thereof to allow to calculate the measure (regardless of whether it is provided in the report) for at least one of the 16 selected interventions.  
• For recurring surveys, we used the most recent survey for a given indicator. This is especially important as various Demographic and Health Surveys (DHS) questionnaires could have been used (DHS6/7/8) and for each of these, questions on coverage of interventions differ. |
| Administrative data     | • Administrative data for a program or intervention implemented at national level (if no programs were administered at national level for a given intervention, then we looked for sub national administrative data).  
• Collected by health systems or implementing programmes (parallel reporting systems).  
• Includes at least one measurement of coverage or the components (numerator/denominator) thereof to allow to calculate the measure (might not be provided in a report) for at least one of the 16 selected interventions. |

**2.3 Identify and assess a countries’ potential to track progress and report coverage of key interventions using the data available**

For each data source identified, we searched for indicators of the 16 nutrition interventions in survey reports and survey questionnaire forms, among others. We indicated the availability of data in a table format. Across all data sources, we assessed if they include data against the potential indicator or if they have data that allows to create/compute a relevant indicator. We extracted the survey question *as asked* in the questionnaire, the definition of the indicator, data elements (numerator and denominator) for the indicator’s construction, and general information on the dataset (data collection frequency, sample size, target population, representativeness). Where no coverage indicator was reported, but the data elements are collected, we report the numerator/denominator. For population-based surveys, we assessed the ease of access to the data based on pre-defined criteria (open access, available upon request, not publicly available, not applicable).

For each country, we identified the nutrition interventions that were implemented at national level through either [DHS country reports](https://dhsprogram.com) or the [NutriDash database](https://nutridash.unicef.org) from UNICEF. Then, we assessed which indicators were available from the identified data sources for these interventions. The resulting information was presented separately for population-based surveys.
and administrative data sources; information on administrative data was contingent upon expert reports. This exercise allowed us to see whether data gaps were due to 1) no indicator availability across both data sources, 2) indicators (or data elements) being collected but not reported in survey reports, 3) the lack of access to administrative data sources despite their possible inclusion of the interventions of interventions. Data gaps were also analysed across the lifecycle stages to see where they were more prominent. Based on these data gaps and data available, we recommended key actions for each country tailored to the specific country gaps and opportunities.

References


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