Data DENT

Data for Decisions to Expand Nutrition Transformation

A comparison of indicators across nutrition data tools

TECHNICAL BRIEF

Introduction

DataDENT recently carried out a global data visualization tool (DVT) in nutrition landscaping (see detailed analysis and blog post) which found that global nutrition DVTs tend to report on certain types of indicators using different definitions which may lead to different conclusions. This can make it challenging to determine which DVTs (and indicators) to use for decision-making and advocacy. To better understand this challenge, we summarized the overlaps and differences in indicator definitions across a select set of DVTs and nutrition monitoring frameworks. This technical brief is accompanied by a blog post and excel spreadsheet.

Methodology

Out of 22 data visualization tools reviewed in the global DVT landscaping in nutrition, we selected seven to include in this analysis:

(1) Scaling Up Nutrition Monitoring, Evaluation, Accountability, and Learning Country Dashboards
(2) The Global Nutrition Report Nutrition Country Profiles
(3) The Hunger and Nutrition Commitment Index Country Scorecards
(4) The Countdown Country Dashboards
(5) The Global Breastfeeding Scorecard
(6) The WHO Nutrition Landscape Information System Country Profiles
(7) The Strengthening Partnerships, Results and Innovations in Nutrition Globally (SPRING) National Anemia Profiles.

The selected DVTs met at least one of two criteria: (1) had at least eight overlapping indicators with another DVT, or (2) focused on a single coverage topic such as breastfeeding. The WHO-UNICEF Global Nutrition Monitoring Framework (GNMF) was also included as it provides operational guidance on the reporting of nutrition indicators to monitor progress and track implementation towards meeting World Health Assembly targets. We mapped the definitions of indicators for each tool across these domains: (1) nutritional status, (2) intervention coverage, (3) IYCF & diet, (4) policy, and (5) finance for nutrition. We then identified overlap and differences in indicator definitions across the tools and identified recurring issues across indicator definitions.

Key Findings

Across the DVTS and frameworks, there was a total of 225 indicators, of which 58 of these were overlapping across two or more sources. Of these 58 overlapping indicators, 42 of them had variability in definitions across the sources. The two most common types of indicators with definition differences included (1) intervention coverage (n= 16) and (2) policy classification (n=9).

Table 1: Common types of definition differences identified

Type of indicator	Definition difference	# of occurrences
Intervention coverage	Intervention type	8
	Intervention quantity	2
	Intervention provided/used	3
Policy classification	Policy classification	9

Examples of definition differences

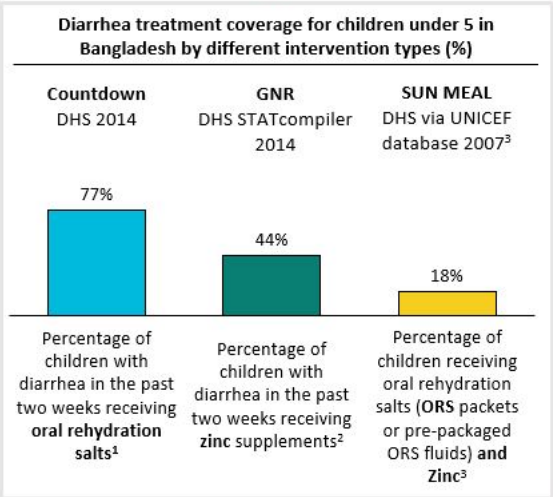
1. Intervention type & quantity

Intervention coverage indicator definitions varied by the **type** and the **quantity** of the intervention being measured, as well as whether the intervention was **provided or used**.

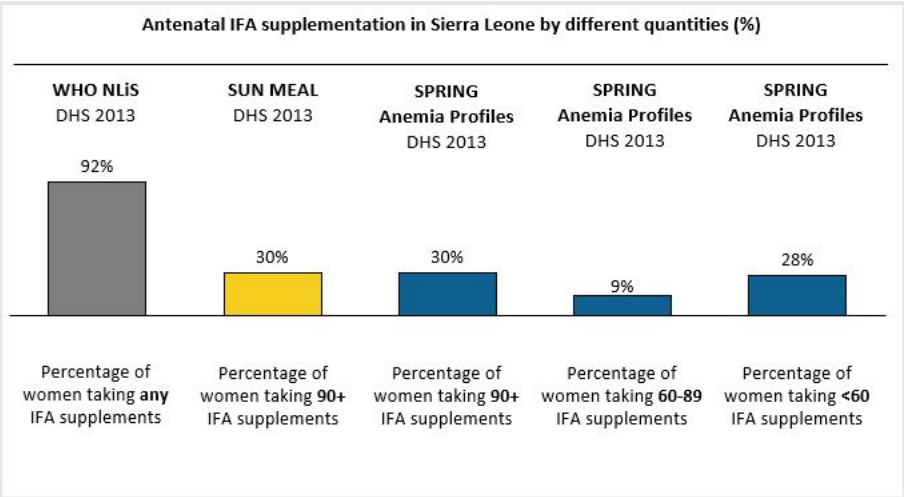
For example, as illustrated below, for the treatment of diarrhea in children under five in Bangladesh, there are a number of indicators reported across different DVTs. Both ORS and zinc are recommended for diarrhea treatment. The Countdown to 2030 country profile reports coverage of ORS supplementation only among children with diarrhea in the last 2 weeks (77% DHS 2017) which is nearly twice the coverage of zinc for diarrhea in the last two weeks reported by GNR (44% DHS 2017). SUN MEAL reports children who received both ORS and zinc for diarrhea in the last two weeks which is by far the lowest (18% DHS 2007). Additionally, the most recent versions of DVTs may use different data source years, therefore reporting different values for the indicator. For example, SUN MEAL's 2019 country dashboard reports both a different indicator definition and an outdated data source year (i.e., 2007) for diarrhea treatment. Finally, DVTs report varying levels of detail on the actual data source used – for the diarrhea example below, DVTs reference only the database or a set of surveys they pulled the data from, whereas for other indicators DVTs note the exact survey or data source.

Similar issues exist when specifying intervention *quantities*, such as the number of IFA supplements consumed during pregnancy, which is also highlighted in the image below with data from Sierra Leone.

Type



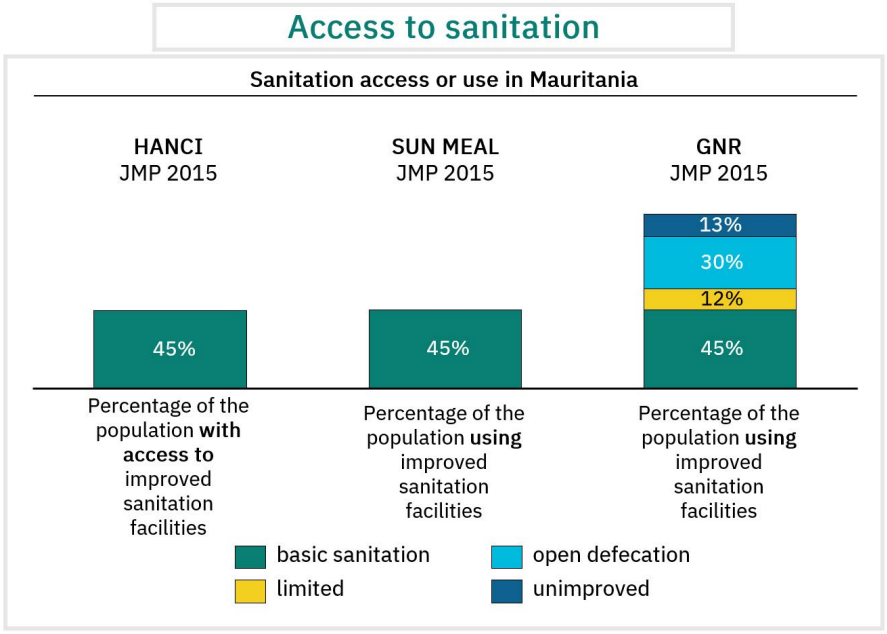
Quantity



Sources:

1. *MICS, DHS, and other national surveys*
2. *Kothari M. and Huestis A., based on 2016 Global Nutrition Report and UNICEF global databases, 2018*
3. *UNICEF, Division of Data Research and Policy (2018). UNICEF Global Databases: Child Health Coverage Database: Children with diarrhea who were given ORS and Zinc, New York, November 2018. (based on MICS, DHS and other national surveys*

We also share an example of differences between intervention *provision vs use* for sanitation coverage in Mauritania, however as shown, this definition difference lies at the DVT level; all DVTs pull from the same data source.



2. Policy

Policy classification differences were largely reflected in DVTs reporting the existence or implementation of policies and plans differently (although all DVTs seemed to rely on the same data sources). For example, as illustrated at right, SUN MEAL and the Global Breastfeeding Scorecard reported the implementation of maternity protection legislation differently. This resulted in different values for the same countries – in this case, Haiti and Guinea – potentially leaving countries and development partners unclear on the action needed. Other common indicators that seem to have similar issues include *Implementation of the Code* and *inclusion of national nutrition targets in national policies.*

	2018 SUN Movement Monitoring, Evaluation, Accountability, Learning (MEAL) Country Dashboards	2018 GLOBAL BREASTFEEDING SCORECARD
	Country has ratified International Labor Organization (ILO) Convention 183 or has passed national legislation in compliance with the three key provisions of the convention	This indicator was calculated based on three aspects of C183 and R191: length of maternity leave, amount of previous earnings paid during leave, and source of funding.
Haiti	Partial	Doesn't meet leave length requirement
Guinea	Yes	Meets leave length requirement
Mali	Yes	Meets basic provisions of Convention 183

Additional definition differences

Below are tables summarizing the types of definitions found for both intervention coverage (Table 2) and policy classification (Table 3) indicators. These tables build on the examples above and the full list of indicator differences across tools can be accessed in the excel spreadsheet.

Table 2: Differences in intervention indicator definitions

Type of intervention Refers to the specific components within an intervention that are reflected in the indicator	**Quantity of intervention** Refers to the amount of the intervention specified in the indicator	**Provision vs. use of intervention** Refers to whether the intervention was assessed based on provision of service or use by recipient
Zinc/ORS for diarrhea • **Zinc only** *(GNR)* • **ORS only** *(GNMF, WHO NLiS, Countdown)* • **Zinc + ORS** *(SUN MEAL, Countdown)*		
IFA supplementation • **IFA, iron tablets, or MNP with iron** *(GNMF, WHO NLiS)* • **IFA** *(GNR, Countdown)* • **Iron-containing tablets or syrup** *(SUN MEAL, SPRING Anemia Profiles)*	**IFA supplementation** • **Any** *(GNMF, GNR, WHO NLiS)* • **For 90+days** *(SUN MEAL, SPRING Anemia Profiles, Countdown)* • **Other time periods** (<60 days; 60-90 days) *(SPRING Anemia Profiles)*	**IFA supplementation** • **Took IFA** *(GNMF, SUN MEAL, WHO NLiS, SPRING Anemia Profiles)* • **Received IFA** *(GNR, Countdown)*
	Vitamin A • **A dose in the last 6 months** *(GNR)* • **Two doses** *(SUN MEAL, HANCI, Countdown)* • **One or two doses** *(WHO NLiS)*	
Availability of fruits and vegetables (grams per capita) • **Includes derived products (i.e. all foods except cereals, roots, tubers)** *(SUN MEAL)* • **Does not specify derived products** *(GNR)*		
	Iodized salt • **Any iodine (qualitative)** *(SUN MEAL, GNR)* • **15-40ppm (quantitative)** *(WHO NLiS)*	**Iodized salt** • **Households "with" iodized salt** *(SUN MEAL, GNR)* • **Households "consuming" iodized salt** *(WHO NLiS)*
Antenatal care visits • **Specifies skilled health personnel (doctor, nurse or midwife)** *(HANCI)* • **Does not specify type of provider** *(Countdown, SPRING Anemia Profiles)*	**Antenatal care visits** • **At least once** *(HANCI)* • **At least 4** *(Countdown, SPRING Anemia Profiles)*	
Density of nutrition professionals • **Specifies dietitians or nutritionists (including nutrition scientists, nutritional epidemiologists and public health nutritionists)** *(SUN MEAL)* • **Does not specify who is a "nutrition professional"** *(GNMF, WHO NLiS)*		
Density of skilled health professionals • **Specifies what counts as a physician, nurse, midwife, and community health worker, etc.** *(GNR, WHO NLiS)* • **Does not specify who is a physician, nurse, or midwife** *(Countdown)*		
		Safely managed sanitation service • **Population "using" service** *(GNMF, SUN MEAL, GNR, Countdown)* • **Population "with access to" service** *(HANCI, WHO NLiS)*

Table 3: Different cut-offs for policy indicator scores

Policy classification Refers to the different ways and methodologies in which DVTs assess presence or quality of policies
Implementation of the BMS code • **Binary indicators (e.g. BMS legislation exists/does not exist)** *(GNMF)* • **Three levels of imp lementation (No legislation and no voluntary agreements adopted in relation to the ICBMS, Voluntary agreements or some provisions stipulated in ICBMS, all provisions stipulated in ICBMS)** *(Countdown)* • **Four levels of implementation (No legal measures, few provisions are in law, many provisions of ICBMS are in law, ICBMS is fully in law)** *(SUN MEAL, HANCI, Global Breastfeeding Scorecard, WHO NLiS)*
Maternity protection • **Adapted convention 183 or similar policy** *(GNMF, SUN MEAL, Countdown, WHO NLiS)* • **Calculated based on three aspects of C183 and R191: length of maternity leave, amount of previous earnings paid during leave, and source of funding** *(Global Breastfeeding Scorecard)* • **Duration of maternity leave** *(WHO NLiS)*
Nutrition targets in national policies • **Number of targets** *(GNR)* • **Time bound target** *(HANCI)*
Integration of nutrition in national policies • **Three option scale (strong, medium, or weak based on the degree to which nutrition is addressed in the Poverty Reduction Strategy paper)** *(WHO NLiS)* • **Rank based on inclusion of under/overnutrition in multiyear national development and economic growth strategies: 1–126 for undernutrition and rank 1–116 for overnutrition** *(SUN MEAL)*