# REPORT OF THE JOINT CONSULTATION ON APPROACHES TO MEASURE COVERAGE OF NUTRITION COUNSELING INTERVENTIONS

Washington, DC | September 17, 2018

# Contents

## Acknowledgements

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## Abbreviations and Acronyms

| | |
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| ANC | antenatal care |
| BF | breastfeeding |
| CF | complementary feeding |
| DHS | Demographic and Health Surveys program |
| GNMF | Global Nutrition Monitoring Framework |
| IYCF | infant and young child feeding |
| MCH | maternal and child health |
| MICS | Multiple Indicator Cluster Survey |
| MIYCN | maternal, infant and young child nutrition |
| MNCH | maternal, newborn and child health |
| PNC | postnatal care |
| TEAM | Technical Expert Advisory group for nutrition Monitoring |
| UNICEF | United Nations Children's Fund |
| USAID | United States Agency for International Development |
| WHO | World Health Organization |

# 1. Introduction

## 1.1. Aim of the consultation

The consultation aimed to consolidate insights from research and implementation efforts and facilitate dialogue that can help make progress towards the development of indicators to measure coverage of infant and young child feeding (IYCF) counseling or behavior change interventions.

## 1.2. Objectives of the consultation

The three objectives of the consultation were:

1) To take stock of survey-based approaches to measure exposure to IYCF counseling and support interventions;
2) To move towards consensus on potential approaches to measuring coverage of IYCF counseling and support interventions; and
3) To identify research needs related to coverage measurement of IYCF counseling interventions.

## 1.3. Expected outcomes of the consultation

The consultation was expected to lead to the development of core survey questions to capture exposure to IYCF counseling interventions, guidance for an approach to design counseling coverage measures and summary of research needs. Outcomes of deliberations at this meeting then fed into a larger global consultation on Measuring Nutrition in Population-Based Household Surveys and Associated Facility Assessments which occurred that same week in Washington, DC. The results will also be reported back to the World Health Organization (WHO), United Nations Children's Fund (UNICEF) and the Technical Expert Advisory group for Nutrition Monitoring (TEAM) and will contribute to guidance to WHO Member States on measuring coverage of maternal, infant and young child nutrition (MIYCN) counseling or behavior change interventions.

# 2. Setting the scene

## 2.1. The need for indicators of IYCF counseling coverage

The indicators for assessing IYCF practices, defined by the WHO and UNICEF in 2008, have advanced the ability of the nutrition community to collect harmonized IYCF-related data. The availability of these indicators has allowed countries to identify gaps in nutrition practices, make valid cross-country comparisons and evaluate the progress of IYCF programs. It has spurred action to invest in programs to strengthen these practices globally – a majority of countries surveyed in the WHO's Global Nutrition Policy Review (WHO, 2018[1]) report that they implement programs to support breastfeeding and complementary feeding.

However, little is known about the reach and coverage of such programs because current survey-based data collection systems do not include indicators to capture the coverage of interventions to support IYCF. Guidance on tracking progress on global nutrition commitments has also recently highlighted that an investment in strengthening measurement of coverage for counseling programs or interventions is central to measuring program performance (WHO, 2017[2]).

A result of the lack of availability of coverage indicators for nutrition counseling interventions to support MIYCN practices is that global monitoring initiatives such as the Countdown to 2030 and the Global Nutrition Report use IYCF practices, such as infant feeding, as proxies for program coverage or performance. This raises several challenges because indicators of practices likely do not accurately reflect intervention coverage.

The Global Nutrition Monitoring Framework (GNMF), released in 2016, included a draft indicator on breastfeeding counseling[3]. The WHO-UNICEF Technical Expert Advisory group for nutrition Monitoring (TEAM) has been tasked to further develop and validate this indicator to support WHO Member States to operationalize and report to the World Health Assembly starting 2018. Since the data to compute an indicator on breastfeeding counseling


[1] Available at: http://www.who.int/nutrition/topics/global-nutrition-policy-review-2016.pdf
[2] http://apps.who.int/iris/bitstream/10665/259904/1/9789241513609-eng.pdf?ua=1
[3] The Global Nutrition Monitoring Framework includes the following as an indicator of reach of counseling programs: "*Proportion of mothers of children 0-23 months who have received counseling, support or messages on optimal breastfeeding at least once in the previous 12 months*".

does not yet exist in most national data systems, current guidance suggests an interim indicator on program availability[4].

In the absence of global guidance and indicators on how MICYN counseling should be delivered, the interventions can vary tremendously depending on context. For example, the types of providers that are tasked with delivering counseling, location of services and the timing and frequency of contact vary from one context to another. This will make standardizing coverage measures challenging. Achieving consensus on a set of indicators is imperative given the current scale of global programming to support MIYCN behavior change interventions and the global monitoring needs described above.

This consultation was particularly timely in 2018 because of ongoing work by the WHO to develop global guidance for breastfeeding counseling and support programs. In addition, there is recognition that an investment in strengthening measurement of coverage for counseling programs/interventions is central to assessing program performance.

## 2.2. Learning from the MNCH coverage measurement process

The consultation included an overview of the lessons learned from research to improve coverage measurement related to maternal, newborn and child health (MNCH), a continuing body of work under the Improving Coverage Measurement (ICM) project (2013-2018, continuing under the Improve project). ICM aimed to increase the availability of evidence for the validity of existing and new MNCH coverage indicators collected through household surveys. It also aimed to increase the availability of evidence-based tools and protocols for routine national-level linkage of data on care-seeking from household surveys with results from service provider assessments.

Findings from several previous studies published in two journal supplements on measuring coverage were presented. The two collections are Measuring Coverage in MNCH[5] by the Child Health Epidemiology Reference Group (CHERG) and Improving Coverage Measurement[6] by ICM. As most intervention exposure is self-reported by respondents, there is the potential for misclassification and bias. Insights related to sources of error in coverage data were discussed, as well as what has been learned from various indicator validation studies (Munos et al., 2018). Key messages that are applicable to measuring IYCF counseling coverage include considering whether the precise cadre of providers matters (as types of health workers seem to be poorly reported), whether precise timing of counseling matters (as timing of events may be challenging


[4] The current interim indicator is defined as "*availability of a national program that includes provision for delivering breastfeeding counseling services to mothers of infants 0-23 months of age through health systems or other community-based platforms*".

[5] https://collections.plos.org/measuring-coverage-in-mnch

[6] http://www.jogh.org/col-coverage-measurement.htm

to recall, particularly during a sensitive time such as delivery), improving recall with memory aids, and reporting accuracy may be more of a problem than recall (McCarthy et al., 2016). Results from past coverage indicator validation studies that reporting accuracy did not significantly decrease with longer recall periods (Chang et al., 2018; McCarthy et al., 2018; Hazir et al., 2013). Moreover, for interventions targeted at small sub-groups (for example, children with pneumonia or severe acute malnutrition), the denominator must be measured with high specificity as to avoid large numbers of false positives in the denominator making the indicator difficult to interpret (Ayede et al., 2018; Hazir et al., 2013).

# 3. Review of current efforts to measure IYCF counseling coverage in program evaluations and large-scale surveys

Building on the lessons learned from MNCH coverage measurement and in line with the larger objective of the consultation meeting, key issues related to IYCF counseling coverage measurement were discussed in detail, with specific examples from evaluation case studies and large, nationally-representative, population-based surveys.

## 3.1. Development of conceptual framework of 7 elements of coverage measures

Background work leading up to the consultation included a review of household survey questions developed by researchers and program evaluators to measure exposure to or coverage of IYCF counseling and behavior change interventions in different contexts. A total of 16 studies (Annex 3) of program evaluations (interpersonal communication/nutrition education interventions related to IYCF) as well as 3 nationally representative surveys (PMA2020, DHS and MICS) were reviewed.

A framework for IYCF counseling measurement was created to illustrate the potential elements to be captured in the design of coverage measures (Figure 1).


*Figure 1 Seven elements addressed in counseling coverage questions*

The seven elements include:

- ***Target behavior/content***: Age-appropriate target behavior or the content of counseling and support received, for example early initiation of breastfeeding and support for proper positioning and attachment.
- ***Recall period***: The length of time respondents are asked to consider in responding to a question. Recall periods for reporting the counseling received vary in length and detail. For example, common recall periods included the last six months and the last year, while specific recall periods included the last 7-8 months of pregnancy, in the first two days after delivery, or during the last visit with a health care provider.
- ***Timing of contact***: There are six general time-periods compiled across the surveys of when IYCF counseling occurs: pregnancy or during antenatal care (ANC) visits, at or immediately after delivery, first six weeks after childbirth or during postnatal care (PNC) visits, 0-5 months of age, 6-23 months of age, and sick child contacts.
- ***Frequency of contact/duration***: Whether any counseling occurred, or the number of sessions, and the duration of session received.
- ***Type of service provider***: The type or cadre of providers delivering counseling, ranging from health care professionals (e.g. doctors, nurses and midwives) to community volunteers and family members.
- ***Place of contact***: The location of counseling such a health care facility and the home.
- ***Mode of intervention***: The mode of counseling includes individual or one-to-one contact, group sessions and via mobile devices.

The review of survey questions showed substantial variability in recall period, frequency, type of provider, and place of contact across different timings of counseling contacts. The parameters of survey design and sampling affected the formulation of survey questions on coverage across all its dimensions. For example, if a survey is administered to all women of reproductive age, additional questions may be required to filter out women who do not have children in the particular age range (child age range to be eligible for breastfeeding and complementary feeding counseling); surveys administered to a specific target group (e.g. recently delivered women) may include more specified questions, or those administered more frequently may include questions with shorter recall periods. Furthermore, the design of interventions assessed in most evaluations varied, thereby also leading to variations across the dimensions.

There was discussion on the need for core and expanded sets of survey questions that will facilitate reporting of harmonized indicators. Core questions are the minimum set for inclusion in large nationally-representative household surveys where there is limited space to include topic-specific questions, while the expanded questions could be implemented as a stand-alone survey, an add-on module to national surveys or in smaller scale studies. When considering a set of core questions, it was suggested that addressing timing, frequency and content of the counseling intervention may be important, with the recall period as close to the service contact as feasible. For an expanded set of questions, it may be important to consider additional information on the types of service provider, locations of service, duration of contact, and mode of intervention.

## 3.2. Findings from case studies of coverage measurement across program evaluations

Experiences in developing survey questions on IYCF counseling coverage, consideration of the seven elements of coverage measurement, and performance of the survey questions were discussed in the context of specific program evaluations.

### Program evaluations case studies

Three case studies of coverage measurement in program monitoring and evaluation were presented: Alive & Thrive - Bangladesh, Sanitation Hygiene Infant Nutrition Efficacy (SHINE) trial, and *Suaahara* II. The program designs were presented as well as key takeaways from analyses looking at some of the seven elements of coverage. Summaries of each measurement case study from program evaluations and the key takeaways are below:

#### *Alive & Thrive - Bangladesh*


Alive & Thrive took place in Bangladesh between 2010 and 2014 and was designed to deliver interventions aimed to improve IYCF practices through intensified inter-personal communication, mass media, and community mobilization delivered at scale in the context of policy advocacy. A total of 27 visits by frontline worker from pregnancy to the end of the first 24 months after delivery were intended to be provided to mothers. Key IYCF counseling content included proper attachment and position, early initiation and exclusive breastfeeding, and demonstration of age-specific complementary feeding, responsive feeding, and handwashing.

Takeaways:

- *Recall period*: Intervention beneficiaries received counseling at various time points, so having questions with different recall periods helped to triangulate responses and shed light on program fidelity. However, different recall periods posed various implications for data validity. Results showed that shorter, more specific recall periods had less spread of data points while longer, unbound recall periods had a larger spread and more data outliers potentially indicating lower accuracy.
- *Type of service provider*: Different types of frontline workers provided counseling, so coverage questions were developed to capture respective proportions of visits and frequencies of counseling delivered by each type of service provider. This was important to capture as the types of information and modes of providing information may vary depending on who provides counseling.
- *Frequency:* Frequency of home visits by frontline workers varied at different stages of pregnancy to the first 2 years of life. Asking about frequency of contact at different periods provided information on fidelity to program design. When asked about the total amount of time spent in

the last visit, the spread of data points showed that it is harder to remember amount of time spent on a specific topic compared to the amount of time spent the on general topics.

When assessing coverage, looking beyond any exposure only (*did you ever*) to better understand when (timing/recall period), how often (frequency), how long (duration), what (content), from whom (type of provider), and where (place of contact) mothers received nutrition counseling served to verify responses and implementation fidelity in the evaluation study context.

### *SHINE - Zimbabwe*


The SHINE trial took place between 2012 and 2016 in Zimbabwe and was designed to achieve dietary intake that meets all nutrient requirements by children between six and 18 months of age in clusters randomized to receive the IYCF interventions, and to prevent all fecal ingestion by the children in clusters randomized to receive the WASH interventions. Exclusive breastfeeding promotion was delivered to all children from birth through 6 months of age as a standard of care. The cluster-randomized trial with a longitudinal design included counseling interventions that were delivered by community health workers within the Ministry of Health system. A total of 15 structured intervention delivery contacts were scheduled for all participating households. However, health workers visited each household monthly to encourage proper IYCF behavior adoption. For all infants from birth to 6 months, counseling content emphasized exclusive breastfeeding promotion. In IYCF clusters, counseling content emphasized the promoted optimal use of locally available foods for complementary feeding after 6 months as well as continued breastfeeding and feeding during child illness.

Takeaways:

- *Recall period*: Data collection contacts occurred in at least 3-month intervals with a recall period of 3 months. This was fit for purpose to assess the appropriateness of messages received depending on the age of children. The intervention beneficiaries reported high exposure to intervention messages, and the trends were consistent between the community health workers' contacts and the expected messages recalled (alluding to high program fidelity). For example, when asked about having received information or heard about how to properly breast feed their child, 86% responded in the affirmative at 6 months. At 12 months the proportion was similar at 81%, but at 18 months 62% recalled having recently heard this. This trend was as intended, as breastfeeding messages were expected to be replaced with messages on complementary feeding as the child aged.

### *Suaahara II - Nepal*


*Suaahara* II is an ongoing 5-year (2016-2021) multi-sector integrated nutrition program in Nepal, which builds on *Suaahara I* (2011-2016) and is designed primarily to improve the nutritional status of pregnant and lactating women and children under two years of age. Other core elements of *Suaahara II* include improving health and family planning services, nutrition, water, sanitation and hygiene, homestead food production (gardening and poultry rearing) and strengthening nutrition governance. The integrated, multi-sectoral program includes the promotion of key MIYCN practices as part of an intensive social behavior change strategy, including interpersonal communication, community events, a weekly interactive radio programs, and more recently, the use of mobile technology. For this, during the 1000-day period, the idea is that a family would receive 4 interpersonal contacts via home visits, participate in at least 3 community mobilization events, hear 33 radio program episodes and receive about 35 mobile texts, to total 75 contact points. The *Suaahara* II monitoring system includes both monthly monitoring data system (representative at the district level and collected internally) as well as annual surveys (representative at the program-wide level and collected by an external survey firm).

Takeaways:

- *Content*: Because of the multisectoral nature of the program and number of topics covered, open-ended questions on content discussed in home visits with field supervisors and heard via mass media were asked. For community events and mobile technology, the content is standardized such that just asking about exposure to the platform is sufficient. Asking detailed questions for each topic would have real implications for time.
- Platform specific: Because the content of ANC is clear in government protocol and limited, specific questions on whether "x" was a part of counselling during ANC are included.
- *Type of service provider, frequency, and other details*: Consideration was given to whether the survey should ask about the specific message, the provider, or the platform, as multiple combinations were possible and have implications for the length of the questionnaire.
- *Lessons learned:* Phrasing of "counselling" didn't work during field testing and thus other wording "what topics did x discuss with you?" were adopted. Also, triangulation is important and thus Suahara II monitoring datasets include parallel questions to capture counselling coverage from the perspectives of health workers and female community health volunteers.

### Discussion related to the 3 examples

A discussion on the complexity and difficulty in measuring coverage of counseling interventions followed the three presentations. Some important points that were raised and proposed to help guide the design of survey questions include 1) what the set of counseling interventions are that need to be measured, and 2) what the priority is to ask in core questions of a large-scale, nationally-representative survey for the purpose of tracking over time and making cross-country comparisons as opposed to questions that will provide more detail about how MIYCN counseling is delivered , which are more appropriate for inclusion in a nutrition-specific national survey, add-on modules to a core questionnaire or in evaluation studies. Moreover, defining what is meant by counseling[7] is needed since the term counseling may not be well-understood by all populations and is defined differently across contexts, sometimes referring to exposure to messages via any mode of communication and other times referring to interpersonal counseling. Most of the surveys reviewed measure coverage of exposure to certain messages via interpersonal communication, rather than to the process of counseling and support. Finally, there was some discussion over what is meant by coverage and who should be included in the denominator of questions. The goal is to know the proportion of a population of mothers who are receiving counseling among those who need the particular type of counseling. Furthermore, from the perspective of the WHO global guidance for breastfeeding programs, the focus is on program delivery and whether the program is reaching all women of reproductive age with the counseling they need. It is not only about the messages they heard but also about the interaction between the counselors and caregivers.

Participants also emphasized the distinction between what program evaluations or intervention research studies and large-scale surveys are trying to measure: in evaluations, measurement is specifically adapted to a known intervention that is delivered, while for large-scale surveys, measurement is broader to address multiple existing programs and what is routinely being delivered from various sources in terms of counseling and support.

## 3.3. Experiences from large nationally representative surveys

The next topic of discussion was related to experiences from three large nationally representative surveys: PMA2020, DHS, and MICS.

### Survey examples: PMA 2020, DHS and MICS

#### *Performance Monitoring and Accountability 2020 (PMA2020)*

PMA2020 started in 2013 as a nationally-representative family planning survey program funded by the Bill & Melinda Gates Foundation and implemented by the Bill & Melinda Gates Institute for Population and Reproductive Health at Johns Hopkins Bloomberg School of Public health. Surveys are implemented in 11 countries through a network of local universities and research institutes. There is a core survey on family planning and WASH that is implemented every 6-12 months across all countries, and several modules including maternal and child health (MCH) and a new nutrition module that have been developed and implemented in select countries.

A nutrition module was tested in Burkina Faso and Kenya over two rounds in 2017 and 2018. The survey includes questions on a number of nutrition interventions that are not measured in other nationally-

[7] The Global Strategy for IYCF (2003) currently defines breastfeeding counseling as “Mothers should have access to skilled support to help them initiate and sustain appropriate feeding practices, and to prevent difficulties and overcome them when they occur”.

representative surveys including four time-points for breastfeeding counseling: during ANC, at delivery/PNC (within 2 days of birth), within the first month of delivery, and during a sick child visit. The intervention of interest was whether women received information about breastfeeding at all four time points and whether breastfeeding was observed by the health care provider around delivery/PNC and within the first month. Both these elements were included as the stem questions in the survey. Additional questions are asked about place, provider and key messages. The survey also includes questions on complementary feeding counseling.

Takeaways:

- *Recall period*: In Burkina Faso and Kenya, there was the expected relationship between the specific messages reported and the time point of recall. For example, when asked about specific messages received during pregnancy, more women reported receiving messages on exclusive breastfeeding and immediate breastfeeding, compared to the 1-month postpartum period when most women reported hearing messages on proper positioning and attachment. This result was as expected, as breastfeeding messages were expected to change as the child aged.
- *Content*: The survey asked about key messages twice – the first pass using an unprompted recall and the second pass asking specifically about messages that were not identified on the first pass. The results show that the unprompted responses were much lower than once prompted – suggesting that method of asking the question is important for comparability.

### *Demographic and Health Survey (DHS)*

The DHS are household surveys that provide nationally representative data on indicators of demographics, health and nutrition among other topics. Technical assistance for survey design and implementation is funded by the United States Agency for International Development (USAID) and implemented by ICF. DHS have been conducted in more than 70 developing countries in Africa, Asia, Australasia, Europe and Latin America and the Caribbean. The standard household surveys comprise sampling of 5000–30 000 households and are usually conducted every 5 years. The DHS surveys usually cover married women and men aged 15–49 years, although they are tailored to the needs of each country. There is a core questionnaire – currently DHS-7 - that is implemented across all countries with minor modifications and is updated approximately every 5 years. Countries can add additional questions to their specific survey.

DHS-7 includes questions on whether a health care provider provided counseling on breastfeeding and observed breastfeeding during postnatal care (within first 2 days of birth) (Annex 4). There was discussion on what background work is required before including additional questions to core questionnaire. The main criteria that need to be met include: 1) relevance to global indicators that lack data, 2) in line with USAID priorities, 3) has been validated (not specifically defined), 4) translatable across different countries, and 5) DHS is the right platform to ask this question.

There were discussions on the lessons learned from the Nepal DHS-7 survey which included additional questions about MIYCN counseling. The surveys asked about whether a woman received MIYCN-related advice from a health worker in the last 6 months, and the type of service provider, the timing of this advice, and the content of the advice (Annex 4). There were three main challenges found in the way these questions were asked: 1) it was difficult for enumerators and respondents to understand what

MIYCN is, 2) the unprompted nature of the questions made it difficult for enumerators to record the correct response, especially given the very short training allotted to these questions, and 3) the sample size for these questions were very small due to the specified recall period (if mothers had a child in the last 1 year, they were then asked whether they received counseling in the last 6 months), which made it difficult to draw any conclusions. Though there were challenges, it was evident that Nepal and other countries, have a high demand to ask about IYCF counseling coverage but need guidance on how to do so effectively. Though the DHS can be used as a platform to ask these questions, it cannot be used as a form to test questions. The questions need to be tested prior to incorporation into the DHS.


### *Multiple Indicator Cluster Survey (MICS)*

The MICS survey is implemented by UNICEF. These surveys began in 1995 and are one of the largest sources of internationally comparable data on women and children. MICS was a major source of data on the World Summit for Children Goals, Millennium Development Goals (MDG) indicators and will continue to be a major data source during the 2030 Sustainable Development Agenda to measure Sustainable Development Goals (SDGs) indicators. Internationally agreed indicators drive the MICS content and all questions included in the surveys are designed to contribute to an indicator – whether to the numerator, denominator or for data disaggregation.

When existing indicators are changed, MICS subsequently changes the content of the surveys. An example is the definition for minimum dietary diversity for children (MDD). The change was agreed at a July 2017 consultation, and in the current round of MICS the new definition in used in the data tabulation plan. When new indicators are developed, MICS may include the indicators if they align with MICS priorities and specified criteria.

There were discussions on the timeline of the MICS surveys. MICS is currently on Round 6 which started in 2016. It includes a household questionnaire, a questionnaire for males and females aged 15–49 years, a questionnaire for children under the age of 5 (based on maternal or caretaker reports), and a questionnaire for 5-17-year-olds. Like the DHS, MICS currently includes questions on whether a health care provider provided counseling on breastfeeding and observed breastfeeding during postnatal care (Annex 4).

As MICS prepares for Round 7, it is considering a shorter core set of questionnaires with other questions kept as optional in a separate category. As MICS Round 6 is ongoing, there are opportunities to include additional questions for field-testing (in early 2019). New questions need to be validated before being included in a MICS field test, and new content requires varying degrees of validation. The pilot test for the full set of MICS questions will take place in early 2020. These pilot tests could potentially yield results demonstrating that new questions are ready to be included in MICS-7, which is planned to be launched at the end of 2020.

# 4. Group discussions about coverage measurement

## 4.1. Framing the group discussions

Two presentations helped to kick off the group discussions: a presentation on the upcoming global guidance on breastfeeding counseling programs, and the programmatic experiences of Alive & Thrive.

### The upcoming WHO global guidance on breastfeeding counseling programs

In the WHO Global Strategy for IYCF, the current definition of breastfeeding counseling states "Mothers should have access to skilled support to help them initiate and sustain appropriate feeding practices, and to prevent difficulties and overcome them when they occur". It mentions aspects related to who provides the counseling as well as the time points during which counseling occurs and the aims of counseling. The WHO is currently providing IYCF counseling training packages that address key IYCF concepts, but the training does not have a specific target audience. Revisions are currently being made to the global guidance on breastfeeding counseling programs with regards to updating the definition of counseling as well as providing details on the timing, frequency, mode of delivery and service providers of counseling. Current draft recommendations include:

- Breastfeeding counseling should be provided during the ANC period, postnatally and up to 24 months or longer.
- Breastfeeding counseling should be provided at least 6 times and additionally as needed, with the expectation of at least one contact during ANC, one postpartum related to the baby friendly hospital initiative, and four other contacts.
- Counseling should be provided through face-to-face contact, and other modes may be used based on context-specific needs.
- Counseling should be provided as a continuum of care by appropriately trained healthcare professionals and community-based counsellors.
- Counseling should take the form of anticipatory counseling. It should anticipate and address important challenges and contexts for breastfeeding in addition to establishing skills, competencies and confidence among mothers regarding breastfeeding.
- Emphasis on the importance of appropriate and timely support of IYCF, especially breastfeeding counseling during emergencies.

### Considerations from the Alive & Thrive experience

In the context of impact evaluations of Alive & Thrive (A&T), which is a global initiative to improve IYCF practices, there was heavy investment in developing survey-based measures of the exposure to IYCF

counseling interventions deployed in different countries. In designing intervention-specific coverage measures, they attempted to capture contact with the countries' unique delivery platform, exposure to counseling/messaging via that platform, and frequency/intensity of exposure as per the service provision protocols in the country. Another approach taken was 'content-tracing' where questions were designed to trace exposure by respondents to very specific content-based messages promoted by A&T. This resulted in a set of intervention- and context-specific questions that were of relevance to individual country programs. There was an emphasis on working within the country systems and A&T programs have used different types of information sharing, depending on the context, from timed and age appropriate messaging in Ethiopia to standardized interpersonal counseling in Vietnam.

These two presentations led to breakout discussions to consolidate ideas around three key dimensions of measuring counseling coverage that would also inform the larger global consultation on Measuring Nutrition in Population-Based Household Surveys and Associated Facility Assessments that occurred the same week. The three group breakout questions that frames the discussions were:

Question 1: What survey questions can best capture exposure to counseling interventions?

Question 2: What counseling coverage measurement issues should be addressed in an extended guidance?

Question 3: What are additional research needs for development and validation of survey-based coverage measures?

The section below summarizes the discussions of each of the groups that discussed these questions and shared them with the plenary.

## 4.2. Summary of group discussions

### Question 1: What survey questions can best capture exposure to counseling interventions?

The task for this group was to attempt to propose/formulate a very brief set of questions that could be integrated into a large-scale survey to measure exposure to breastfeeding and complementary feeding counseling. Participants were asked to draw on insights from the discussions throughout the day, building on the existing questions in the DHS and MICS questionnaires to ground the discussion.

The group discussed possible options with the intention to add the least number of questions possible considering the length limit of DHS or MICS. The group agreed that asking about the content of counseling (e.g. what messages were given, were problems resolved) was too detailed for a DHS or MICS.

The group agreed that respondents likely have different interpretations of the term "counseling". On the other hand, "receiving messages" or "being told something about breastfeeding" does not capture the interaction that is expected to take place in counseling. The group proposed language such as "Did a health provider or community worker discuss/talk with you about […]?"

The group suggested to ask about counseling during pregnancy, in the first few days after delivery, in the first month after delivery, and in the previous 6 months. For the question on counseling in the previous 6 months, it was proposed that differentiating between counseling related to complementary feeding and counseling related to breastfeeding would be important.

*Post-consultation email-based exercise on additional questions*

A follow-up exercise with all participants examined the issues related to capturing timing, contact, content, and provider to develop questions for inclusion in the ANC, PNC and the child health and nutrition modules of a survey like the DHS. Participants were sent an email the day after the consultation and asked to indicate their preferences for proposed questions to be asked of caregivers of children <2 years of age (exercise prompts can be found in Annex 5), which included:

1. During this pregnancy, did a health care provider or community worker talk with you about breastfeeding? (to be asked with other ANC questions)
2. During the first two days after (NAME)'s birth, did any health care provider do the following:
    a. Examine the cord?
    b. Measure temperature?
    c. Counsel you on danger signs for newborns?
    **d. Counsel you on breastfeeding?**
    e. **Observe breastfeeding?**
3. During the first month after (NAME)'s birth (but after first two days), did a health care provider or community worker talk with you about breastfeeding?
4. In the last six months, did a health care provider or community worker talk with you about how to feed your child?

4a. (If yes,) What topics did he or she talk with you about? (list would differentiate topics on breastfeeding and topics on complementary feeding)

For question 3, some participants believed that the question is not needed since question 4 could capture this time window. Since the time periods covered in questions 3 and 4 will be overlapping for mothers of children less than 7 months of age, this could result in double-counting. The majority, however, believed that counseling in the first month following discharge is a critical window for breastfeeding problems and deserves a separate indicator.

An alternative formulation of question 4 and 4a would be to ask one question about breastfeeding and one question about feeding foods and liquids, other than breastmilk. The group was divided on this question, with a majority favoring the original formulation.

The proposed questions would allow the calculation of the following indicators:

- Proportion of women who received BF counseling in their last pregnancy
- Proportion of women who received BF counseling in the first two days
- Proportion of women who BF counseling in the first month (but after first 2 days)
- Proportion of women who received BF or CF counseling in the last 6 months
- Proportion of women who received at least 4 BF counseling contacts at recommended time periods

### Question 2: What counseling coverage measurement issues should be addressed in an extended guidance?

The task for this group was to discuss the types of issues that should be covered in a guidance document on issues to consider in developing robust measures of exposure to nutrition counseling and behavior change interventions. This covers a more exhaustive set of questions that could be implemented as a stand-alone survey, an add-on module to national surveys or for use in smaller scale studies and evaluations so that data are harmonized. The group was asked to help prioritize the dimensions in the measurement guidance, drawing on the seven dimensions of coverage discussed in relation to breastfeeding and complementary feeding.

The group agreed that all the elements are important to prioritize and emphasized that asking about type of service provider is important because it provides more details on where mothers receive information which could help implementers better target interventions. This is also the case for asking about location. The group also highlighted the importance of measuring misinformation given during counseling, exposure to competing messages, e.g. marketing of breast milk substitutes and to provide guidance on how to measure this. There were discussions on the need for guidance on measuring specific counseling topics, such as early initiation of breastfeeding as well as the maintenance and management of supply of breast milk. They also suggested it would be helpful to have guidance and suggestions for designing on open-ended questions to assess the quality and counseling.

### Question 3: What are additional research needs for development and validation of survey-based coverage measures?

This group was asked to reflect on the issues raised earlier in the day to consider in the development and validation of survey-based coverage questions and indicators. The group was tasked to reflect on the issues to examine in validation studies similar to those done in MNCH coverage measurement research and discuss and summarize what some emerging research needs might be around development of measures of exposure to breastfeeding and complementary feeding counseling.

The group identified three broad areas of future research:

1. How to select the appropriate indicators and the implications these indicators have for shaping programs and policies. Such needs will vary based on country context and what indicators countries need that reflect their own strategies.
2. Unpacking the seven dimensions of coverage - each dimension could have an accompanying research agenda. The group agreed it is crucial to determine the right time points and recall periods of questions, and to unpack the different terminology related to counseling and how to operationalize them (how you ask about service providers, how you phrase the question). The group also discussed the inevitability of social desirability bias and emphasized the importance

of knowing how to address this as part of future research (an example was provided on using technology to ask sensitive questions).

3. Research on the different indicators required for different types of surveys. Facility based surveys may address continuity of service delivery and coverage compared to research evaluations which are interested in quality and different dimensions of coverage as well as adoption of practices.

The group also discussed how a guidance on coverage measurement may set expectations that certain functions of counseling will address IYCF needs. But it is important to also consider other structural factors in place, such as maternity protection laws and employment options, which also affect IYCF. It is important to frame the coverage measurement guidance in a way that shows counseling interventions are one piece of a larger system that works together to improve IYCF.

## 5. Closing remarks and way forward

The consultation aimed to consolidate insights from research and implementation efforts and facilitate dialogue that can help make progress towards the development of indicators to measure coverage and reach of IYCF counseling or behavior change interventions. Throughout the consultation, there were discussions on the complexity of measuring counseling coverage and the need for validation studies. The seven elements of counseling coverage were streamlined throughout the discussions and survey case studies. The working group discussions attempted to address what questions could be included in core and extended modules on breastfeeding coverage, and existing research needs for the development and validation of survey-based coverage measures.

There was also a discussion on how data from these modules could be used. Some uses include:

- Provide data to support country reporting on Global Nutrition Monitoring Framework indicator on coverage of breastfeeding counseling programs. Current GNMF indicator: Proportion of women with a child <24 months of age who received at least one counseling contact in the last one year. [NOTE – this indicator can be reformulated with TEAM, and based on data availability].
- Support the availability of data to report on country programming on BF and CF (which is currently reported as very high in the Global Nutrition Policy Review) but data gaps preclude assessment of reach of programs. The proposed indicators are consistent with the draft WHO

guidelines on breastfeeding counseling and capture most of the dimensions described in those guidelines.

- Coverage monitoring in the context of new large-scale nutrition programs being funded both nationally and through global financing mechanisms, all of which include programs to support and promote infant and young child feeding programs.
- Country uses of various types to support programs

Some next steps to move this work forward include:

1. Prepare a meeting report to document discussions, particularly to inform continued guidance development work by WHO and TEAM. This document serves as that meeting report.
2. Document the review of survey questions and the seven elements of counseling coverage measurement as a public good such as a discussion paper or manuscript.
3. Identify research opportunities to examine issues related to counseling coverage, such as secondary analyses of existing datasets and a validation study.

## Annex 1. Agenda

| TIME | SESSION | PRESENTER |
|---|---|---|
| *8.30 - 9.00* | *Registration and breakfast* | |
| | **SESSION 1: WELCOME AND INTRODUCTION** | **Moderator: Purnima Menon** |
| 9.00 - 9.15 | Welcome and meeting background | Silvia Alayon<br>Rebecca Heidkamp |
| 9.15 - 9.45 | Participants' introductions | |
| 9.45 - 9:55 | Relevance of coverage measurement in the context of WHO's global nutrition monitoring framework | Kuntal Saha |
| 9:55 - 10.30 | **Keynote address:**<br>Improving coverage measurement in maternal, newborn and child health<br>Q&A | Melinda Muños |
| *10.30 - 10.50* | *Coffee/tea break* | |
| | **SESSION 2: REVIEW OF CURRENT EFFORTS TO MEASURE IYCF COUNSELLING COVERAGE IN PROGRAM EVALUATIONS** | **Moderator: Silvia Alayon** |
| 10.50 - 11.20 | Review of coverage indicators for IYCF counseling: Overview and findings | Sunny Kim |
| 11.20 - 11.30 | **Coverage measurement case studies:**<br>• Scaling up infant and young child feeding counselling, Alive & Thrive, Bangladesh | Phuong Nguyen |
| 11.30 - 11.40 | • Sanitation and Hygiene to Improve Nutrition and Enteropathy (SHINE), Zimbabwe | Mduduzi Mbuya |
| 11.40 - 11.50 | • Insights from the *Suaahara* annual monitoring survey on the reach of counselling services in Nepal | Kenda Cunningham |
| 11.50 - 11.55 | Discussant remarks | Melinda Muños |
| 11.55 - 12.20 | Q&A/discussion | |
| *12.20 - 12.50* | *Break to pick up lunch* | |
| | **SESSION 3 (WORKING LUNCH): REVIEW OF CURRENT EFFORTS TO MEASURE IYCF COUNSELLING COVERAGE IN LARGE-SCALE SURVEYS** | **Moderator: Sunny Kim** |
| 12.50 - 13.10 | Current efforts in large-scale surveys (DHS, MICS, SMART) and the PMA2020 experience | Rebecca Heidkamp |
| 13.10 - 13.15 | Insights on integrating counselling coverage questions into the DHS | Sorrel Namaste |
| 13.15 - 13.20 | Insights on integrating counselling coverage questions into the MICS | Chika Hayashi |

| TIME | SESSION | PRESENTER |
|---|---|---|
| 13.20 - 13.45 | Q&A/discussion | |
| | **SESSION 4: BREAKOUT DISCUSSIONS** | **Moderator: Purnima Menon** |
| 13.45 - 13.55 | **Framing the discussion:**<br>• Update on the global guidance on breastfeeding counselling programs | Laurence Grummer-Strawn |
| 13.55 - 14.05 | • Overview of minimum program elements in Alive & Thrive's IYCF counselling/behaviour change interventions | Silvia Alayon |
| 14.05 - 14.15 | Q&A | |
| 14.15 - 14.20 | Breakout assignments<br>*Coffee/tea available at 14.30* | |
| 14.20 - 15.20 | **Discussion questions:**<br>- What survey questions can best capture exposure to counselling interventions? | |
| | - What counselling coverage measurement issues should be addressed in an extended guidance? | |
| | - What are additional research needs for development and validation of survey-based coverage measures? | |
| | **SESSION 5: CLOSING AND NEXT STEPS** | **Moderator: Rebecca Heidkamp** |
| 15.20 -15.50 | Report back on table discussions | Rapporteurs |
| 15.50 -16.45 | Reflections and discussion | |
| 16.45 -17.00 | Summary and closing | Purnima Menon<br>Ellen Piwoz |

## Annex 2. List of participants

**Silvia Alayon**
Monitoring, Learning, and Evaluation Advisor
Alive & Thrive

**Jeniece Alvey**
Nutrition Advisor
USAID

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**Jowel Choufani**
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*Suaahara* Senior Technical Advisor
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**Sunny Kim**
Research Fellow
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**Monica Kothari**
M&E Lead/MQSUN+
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**Habtamu Lashtew**
Nutrition Director
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**Mduduzi Mbuya**
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Global Alliance for Improved Nutrition

**Vrinda Mehra**
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**Kuntal Saha**
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**Andrew Thorne-Lyman**
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Johns Hopkins Bloomberg School of Public Health

## Annex 3. List of studies and surveys reviewed

| Project | Country | PI institution | Survey round |
|---|---|---|---|
| Alive & Thrive | Bangladesh | IFPRI | Endline 2014 |
| Alive & Thrive | Vietnam | IFPRI | Endline 2014 |
| Alive & Thrive | Ethiopia | IFPRI | Endline 2017 |
| Alive & Thrive | Burkina Faso | LSHTM | Endline 2017 |
| Alive & Thrive (maternal nutrition study) | Bangladesh | IFPRI | Endline 2016 |
| Alive & Thrive (maternal nutrition study) | India | IFPRI | Baseline 2017 |
| CAS (Common App Software) | India | IFPRI | Process Evaluation 2017 |
| Convergence | India | IFPRI | 2014 |
| Mama SASHA | Kenya | Emory | Endline 2014 |
| PM2A | Guatemala, Burundi | IFPRI | Endline 2014 |
| PROMIS | Burkina Faso, Mali | IFPRI | Endline 2017 |
| SELEVER | Burkina Faso | IFPRI | Endline 2017 |
| SHINE | Zimbabwe | Zvitambo, JHU | Baseline - 18mo visit 2016 |
| TMRI | Bangladesh | IFPRI | Endline 2014 |
| TRAIN | Bangladesh | IFPRI | Baseline 2016 |
| WINGS | India | IFPRI | Midline 2017 |
| PMA2020 | Burkina Faso, Kenya | JHU | Round 2 2018 |
| DHS, MICS | Various | ICF, UNICEF | |

# Annex 4. Questions about IYCF advice in last 6 months

## DHS questions on breastfeeding counseling and observation as part of PNC question set

| | | | | | |
|---|---|---|---|---|---|
| 457 | During the first two days after (NAME)'s birth, did any health care provider do the following: | | YES | NO | DK |
| | a) Examine the cord? | a) CORD | 1 | 2 | 8 |
| | b) Measure (NAME)'s temperature? | b) TEMP. | 1 | 2 | 8 |
| | c) Counsel you on danger signs for newborns? | c) SIGNS | 1 | 2 | 8 |
| | d) Counsel you on breastfeeding? | d) COUNSEL BREAST-FEED | 1 | 2 | 8 |
| | e) Observe (NAME) breastfeeding? | e) OBSERVE BREAST-FEED | 1 | 2 | 8 |

## Nepal DHS-7 questions on breastfeeding counseling and observation in the last 6 months

| | | | |
|---|---|---|---|
| 653C | Have you been counseled by any health related professional (including FCHV) about Maternal, Infant and Young Child Nutrition (MIYCN) in the last 6 months? | YES ..... 1<br>NO ..... 2 → 653G | |
| 653D | Who gave you this advice/counseling on nutrition? | **HEALTH PERSONNEL**<br>DOCTOR ..... A<br>NURSE/MIDWIFE/ANM ..... B<br>HEALTH ASSISTANT/AHW ..... C<br>MCHW ..... D<br>VHW ..... E<br><br>**OTHER PERSON**<br>TRADITIONAL BIRTH ATTENDANT ..... F<br>FCHV ..... G<br>MOTHER'S GROUP ..... H<br>SOCIAL MOBILIZER ..... I<br>TRADITIONAL HEALERS ..... J<br><br>OTHER _____ X<br>(SPECIFY) | |
| 653E | When did you receive the advice or counseling? | DURING ANC VISIT ..... A<br>DURING PNC VISIT ..... B<br>VISIT TO HEALTH FACILITY ..... C<br>DURING FCHV HOME VISIT ..... D<br>DURING HEALTH MOTHER'S GROUP MEETING E<br><br>OTHER _____ X<br>(SPECIFY) | |
| 653F | What were you counseled on? | NEED FOR PREGNANT WOMEN TO GET SUFFICIENT REST ..... A<br>PREGNANT WOMEN EAT HEALTHY ..... B<br>PREGNANT WOMAN SHOULD EAT ONE EXTRA MEAL PER DAY ..... C<br>PREGNANT WOMEN SHOULD TAKE RECOMMENDED DOSE (180 DAYS) OF IRON TABLETS ..... D<br>BREASTFEED WITHIN ONE HOUR OF BIRTH .. E<br>EXCLUSIVELY BREASTFEED INFANTS FOR 6 MONTHS AFTER BIRTH ..... F<br>TIMING AND INTRODUCTION OF COMPLEMENTARY FOOD AND CONTINUE BREASTFEEDING FOR UPTO 2 YEARS ..... G<br>OTHER _____ X<br>(SPECIFY) | |

## MICS questions on breastfeeding counseling and observation as part of PNC question set

| | | |
|---|---|---|
| **PN25**. During the first two days after birth, did any health care provider do any of the following either at home or at a facility:<br><br>[A] Examine (***name)***'s cord?<br><br>[B] Take the temperature of (***name)***?<br><br>[C] Counsel you on breastfeeding? | YES NO DK<br><br>EXAMINE THE CORD ..... 1 2 8<br><br>TAKE TEMPERATURE..... 1 2 8<br><br>COUNSEL ON BREASTFEEDING.... 1 2 8 | |
| ***PN26****. Check MN36: Was child ever breastfed?* | YES, MN36=1..... 1<br>NO, MN36=2..... 2 | 2 ⇨*PN28* |
| **PN27.** Observe (***name***)'s breastfeeding? | YES NO DK<br><br>OBSERVE BREASTFEEDING.....1 2 8 | |

## Annex 5. Exercise on additional survey questions on counseling coverage

Note: this exercise was circulated to all participants in a follow-up email after the meeting

*Proposed questions highlighted in yellow.
**Option 2 formulation for IYCF coverage in first two years is in green.

| SECTION 4. PREGNANCY AND POSTNATAL CARE | | | |
|---|---|---|---|
| NO. | QUESTIONS | LAST BIRTH, NAME/ CODING CATEGORIES | SKIP |
| 4xx | During this pregnancy, did a health care provider or community worker talk with you about breastfeeding? | YES<br>NO<br>DON'T KNOW | |
| 457 | During the first two days after (NAME)'s birth, did any health care provider do the following:<br>a) Examine the cord?<br>b) Measure temperature?<br>c) Counsel you on danger signs for newborns?<br>d) **Counsel you on breastfeeding?**<br>e) **Observe breastfeeding?** | YES<br>NO<br>DON'T KNOW | |
| 4xx | During the first month after (NAME)'s birth (but after first two days), did a health care provider or community worker talk with you about breastfeeding? | YES<br>NO<br>DON'T KNOW | |
| SECTION 6. CHILD HEALTH AND NUTRITION | | | |
| **OPTION 1: TWO TOPIC-SPECIFIC QUESTIONS – ONE ON BF AND ONE ON CF** | | | |
| 6xx | In the last six months, did a health care provider or community worker talk with you about breastfeeding? | YES<br>NO<br>DON'T KNOW | |
| 6xx | In the last six months, did a health care provider or community worker talk with you about how to feed your child foods and liquids, other than breastmilk? | YES<br>NO<br>DON'T KNOW | |
| **OPTION 2: 1 LEAD-IN QUESTION AND THEN 1 FOLLOW-UP QUESTION ON CONTENT** | | | |
| 6xx | In the last six months, did a health care provider or community worker talk with you about how to feed your child? | YES<br>NO<br>DON'T KNOW | NO… 2<br>(SKIP TO 6xx) |
| 6xx | What topics did he or she talk to you about? | 1) BREASTFEEDING<br>2) NOT GIVING WATER IN THE FIRST SIX MONTHS OF LIFE | |

| | | | |
|---|---|---|---|
| | | 3) FEEDING OTHER FOODS STARTING AT 6 MONTHS OF AGE<br>4) FEEDING A VARIETY OF FOODS<br>5) FEEDING ANIMAL SOURCE FOODS<br>6) HANDWASHING BEFORE FEEDING<br>7) **TOPIC LIST CAN BE REDUCED OR EXPANDED** | |

**Scenarios for indicator creation using the above questions in a survey instrument:**

There are two potential scenarios for indicator creation using these questions in a survey instrument – one with the 1 month postpartum included and one without that included. We demonstrate these below, highlighting the options for indicators using the one month postpartum and not using the one month postpartum contact question.

| 6 contacts: | Pregnancy/ANC | 2 days/PNC | 1-2 weeks | 3-4 months | 5/6 months | 6-23 months |
|---|---|---|---|---|---|---|
| Questions: | During last pregnancy… | During the first 2 days… | During first month of life (but after first 2 days)… | In the last 6 months… | | |
| **If child age** | | | | | | |
| 3 months | Y/N | Y/N | Y/N | Y/N (overlaps with pregnancy, 2 days, 1-2 wk) | | |
| 11 months | Y/N | Y/N | Y/N | | Y/N (any time when child was 5-11 mo) | Y/N (anytime during child age 5-11 mo) |
| *Indicator that can be created:* | *Proportion of women who received BF counseling in their last pregnancy* | *Proportion of women who received BF counseling in the first two days* | *Proportion of women who BF counseling in the first month (but after first 2 days)* | *Proportion of women who received BF or CF counseling in the last 6 months* | | |
| Questions: | During last pregnancy… | During the first two days… | In the last six months… | | | |
| **If child age** | | | | | | |

| | | | | | | |
|---|---|---|---|---|---|---|
| 3 months | Y/N | Y/N | | Y/N (overlaps with pregnancy, 2 days) | | |
| 11 months | Y/N | Y/N | | | | Y/N (anytime during child age 5-11 mo) |
| *Indicator that can be created:* | *Proportion of women who received BF counseling in their last pregnancy* | *Proportion of women who received BF counseling in the first two days* | *Proportion of women who received BF or CF counseling in the last 6 months* | | | |