
**The Sixth Meeting of the WHO-UNICEF
Technical Expert Advisory group on nutrition
Monitoring (TEAM)**

**Meeting Report
9-10 July 2018
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Acronyms

ANC	Antenatal care
Data-DENT	Data for decisions to expand nutrition transformation
DHS	Demographic and Health Surveys
FAO	Food and Agriculture Organization of the United Nations
GPW	WHO General Programme of Work
GNPR	Global Nutrition Policy Review
GNMF	Global Nutrition Monitoring Framework
HIC	High-income country
HMIS	Health management information system
IFA	Iron and folic acid
IFPRI	International Food Policy Research Institute
IYCF	Infant and young child feeding
JME	Joint child malnutrition estimates
LIC	Low-income country
LMIC	Lower-middle income country
MAD	Minimum acceptable diet
MDD	Minimum diet diversity
MICS	Multiple Indicator Cluster Surveys
MIYC	Maternal, infant and young child
MMF	Minimum meal frequency
M&E	Monitoring and evaluation
NCD	Noncommunicable diseases
NIPN	National information platforms on nutrition
NIS	Nutrition information systems
NI	Nutrition International
PMA	Performance monitoring and accountability
SAM	Severe acute malnutrition
SDG	Sustainable Development Goals
SMART	Standardized Monitoring & Assessment of Relief & Transitions
SPRING	Strengthening Partnerships, Results and Innovations in Nutrition Globally
SUN	Scaling Up Nutrition
TEAM	Technical Expert Advisory group on nutrition Monitoring
ToR	Terms of reference
UNICEF	United Nations Children's Fund
WBTI	World Breastfeeding Trends Initiative
WHA	World Health Assembly
WHO	World Health Organization

1. Background

In 2015, WHO and UNICEF established an independent Technical Expert Advisory group on nutrition Monitoring (TEAM) to advise on enhancing nutrition monitoring at all levels. The TEAM identifies emerging research questions and needs related to nutrition monitoring and recommends action to develop or refine indicators and methods for the Global Nutrition Monitoring Framework (GNMF). A specific focus of the TEAM during the first two years was developing an extended set of indicators to monitor the Comprehensive Implementation Plan on Maternal, Infant and Young Child Nutrition, consistent with the global nutrition targets decided by the World Health Assembly (WHA).

The TEAM is a gender- and regionally balanced group of twelve technical experts with support provided by a joint WHO-UNICEF Secretariat. Thematic sub-working groups are convened as needed. The roles and responsibilities, scope and purpose, and operational modalities of the TEAM are described in its Terms of Reference.¹

This report provides a summary of discussions, recommendations and decisions stemming from the **sixth TEAM meeting**, held in Geneva from 9–10 July 2018. The summary of the outcomes of the previous five TEAM meetings is presented in Annex I; the agenda and list of participants for this meeting are included in Annex II and III.

2. Summary of presentations and discussions

Welcome and introductions

On behalf of the TEAM Secretariat, Chika Hayashi of UNICEF and Kuntal Kumar Saha of WHO welcomed TEAM members and provided an overview of the meeting objectives. The objectives of the 6th TEAM meeting were: i) update on progress on the TEAM workplan; ii) further refine the work being undertaken by TEAM based on discussions and identify clear next steps; and iii) revise the TEAM workplan accordingly.

Session 1: WHO's work on global nutrition

Francesco Branca of WHO provided an update on WHO's work in the context of growing global momentum for nutrition, including the UN Decade of Action on Nutrition, which supports country-led action to implement the 2030 Agenda. The Decade of Action has six cross-cutting action areas: i) sustainable, resilient food systems for healthy diets; ii) universal coverage of essential nutrition interventions; iii) social protection and nutrition education; iv) trade and investment for improved nutrition; v) safe and supportive environments for nutrition at all ages; and 6) nutrition governance and accountability.

WHO's nutrition strategy 'Ambition and action in nutrition, 2016–2025' guides its support to Member States in achieving Sustainable Development Goals (SDGs) 2 and 3 on improved nutrition and healthy lives.

WHO's Director-General has an ambitious vision to reach all populations with essential health services and address global challenges around emergencies and health security. This vision has been translated into WHO's 13th General Programme of Work (GPW13) 2019–2023, which was endorsed by Member States during the 2018 World Health Assembly (WHA). The new GPW13 grounds WHO's work in the SDGs and calls on WHO to measure impact, prioritize, step up its leadership at all levels, drive impact in every country, strengthen its normative framework, transform its approach to resource mobilization and act with a sense of urgency, scale and quality.

Points of discussion:

Some participants requested clarification on WHO's leadership versus advocacy, the positioning of nutrition within the NCDs cluster, and WHO's engagement in efforts to reduce salt intakes. The focus on leadership was meant to convey WHO's role in generating action and that WHO intends to take responsibility for achieving or failing to achieve global targets. WHO's work on salt reduction is currently being undertaken by colleagues working on NCDs, while nutrition staff are responsible for the work on trans fats. WHO has a framework for engagement with non-state actors and is currently working to improve dialogue with the private sector, including food manufacturers.

In response to a question about WHO's organigram, it was noted that WHO was restructuring its work according to 'models to deliver' – for example, groups to deliver on the reduction of stunting. Some participants found it troubling that nutrition work was included within the NCDs cluster rather than under family, women and adolescents. Nutrition is cross-cutting across the work of a number of clusters.

There was a request for more information on the type of technical assistance that WHO would provide, how countries would be prioritized and whether this would include resources. Technical assistance to countries would be prioritized according to burden of disease, country commitment and WHO's capacity on the ground. WHO will identify countries where it can influence countries to put nutrition on the agenda and advocate for key investments, bringing partners on board to help catalyze action. WHO has 60 nutrition staff and the intent is to scale up field presence to better deliver on field functions in collaboration with partners.

Session 2: Refinement of antenatal iron supplementation indicator

There is no global standard indicator for iron and folic acid (IFA) coverage. The original coverage indicator included in the Global Nutrition Monitoring Framework (GNMF) posed a number of reporting challenges for countries. Under the guidance of the TEAM sub-group on IFA, a comprehensive scoping exercise² was undertaken by a consultant to determine whether countries could report on the original indicator and to make a recommendation for the GNMF guidance. Based on the findings, TEAM proposed an interim IFA indicator to allow for reporting to the WHA in 2017: The percent of women who consumed any iron-containing supplements during the current or past pregnancy within the last 2 years.

In the second cycle workplan, TEAM agreed to keep development of a global standard indicator for IFA on its workplan. During the meeting, TEAM reviewed ongoing work related to development of a global IFA indicator.

- Under the Johns Hopkins IMPROVE/Coverage Grant, a validation study of IFA receipt is being conducted in Nepal to test the validity of Demographic Health Survey (DHS) questions. Researchers will observe the intervention being delivered during ANC visits, wait for a specified recall period and then conduct household interviews to ask if the intervention has been received. Results should be available by mid-2020.
- Nutrition International (NI) is supporting several country activities which could be useful for TEAM in the process of proposing a standard IFA indicator. Seven country surveys were undertaken about IFA consumption that included questions about the quality of respondent recall (e.g. asking questions about memory). The University of Toronto is developing quality assurance tools based on these data sets, which will be available in 2018. NI has planned additional activities for 2018-2019 related to IFA measurement, including: 1) applying the University of Toronto's data quality tools to launch new surveys; 2) conducting cognitive interviews to improve IFA questions in one Asian and one African site; and 3) undertaking a data

monitoring exercise on IFA consumption and distribution comparing community health worker records to women's reports.

TEAM was asked to consider the intended outcome and way forward for the work on developing a global IFA indicator, including whether TEAM should define and fund activities to complement those ongoing via Johns Hopkins and NI and/or organize a global consultation about IFA measurement once the findings are available.

Points of discussion:

It was noted that the IFA indicator had remained an item on TEAM's workplan without a clear long-term objective of this piece of work. It does not seem likely that the data sources will improve or that a better indicator will be found during the GNMF reporting period. However, TEAM could continue this work as a contribution to the greater good to fill the remaining gaps or convene a meeting to develop a set of recommendations for a better global indicator on IFA supplementation.

The work taking place on validation of this indicator is occurring separately from TEAM and will continue. There was a question about how this work could lead to the development of a better IFA indicator and it was noted that if the studies show that maternal recall of IFA receipt is accurate, it would confirm that it is worthwhile to continue collecting data based on recall.

The Secretariat noted that TEAM could take time before proposing a new IFA indicator under the GNMF so as not to confuse Member States with multiple changes. A balance is needed between having a comprehensive understanding of the IFA issue and overloading countries with new/more data collection.

It was noted that unless a new global indicator was adopted by DHS and MICS, it would be difficult to collect the data. It would therefore be important to begin communication with household survey groups to understand their minimum standards. TEAM's recommendations would give the Secretariat a mandate to work with Member States, MICS and DHS to ensure that data is collected in a way that allows the IFA and other indicators to be measured.

TEAM should also play a role in helping WHO address the challenges, raising validity concerns and proposing solutions, and offering ways to better collect data in the medium term, in order to still report by 2025. It would be important to emphasize that countries should collect other data that is meaningful for their context, in addition to data on the core indicator.

Some TEAM members inquired whether any analysis needed to be done with the interim indicator to assess whether it is sufficient (e.g., does it differentiate countries with very good or very poor coverage? Does it describe change of time?).

The TEAM sub-group for IFA noted the importance of having resources and asked the Secretariat to confirm what resources would be allotted for this work going forward. It was suggested to have a call with Sarah Wuehler from NI to discuss the scope of future work and potentially invite her to join the sub-group. WHO noted that some funding could be made available for a secondary analysis but requested TEAM to propose specific next steps and what resources are needed.

Session 3: Developing, testing and validating breastfeeding counseling indicators

Although a breastfeeding counselling indicator was included in the first set of GNMF indicators, the lack of available data from surveys and administrative systems was identified as a key challenge. TEAM recommended an interim indicator to allow countries to report on the existence of national-level

provision of breastfeeding counselling services as part of the Global Nutrition Policy Review (GNPR) or the World Breastfeeding Trends Initiative (WBTI). The lack of available data on nutrition counselling interventions has also been flagged by the Countdown to 2030 as a substantial challenge.

There had been previous agreement among TEAM to do additional work to move the breastfeeding counselling indicator agenda forward. With support from Alive & Thrive and Data for Decisions to Expand Nutrition Transformation (DataDENT) and WHO, work is underway to review current survey-based approaches for the measurement of maternal nutrition and infant and young child feeding (IYCF) counselling and create a guiding framework for counselling measurement, with the objective of developing guidance for IYCF intervention coverage indicators. The guidance would include a set of common core questions that can be used within nationally representative large-scale surveys, as well as guidance for counselling measures and country adaptations.

In early 2018, questionnaires from 17 projects were reviewed, looking at the timing of communication and targeted practices (mainly exclusive breastfeeding) and frequency of contact. The framework for assessing the dimensions captured by coverage questions in surveys overlaps with the WHO guidance development on breastfeeding counselling programmes. The review showed wide variability in different data collection instruments and the way survey questions are formulated to assess coverage of exclusive breastfeeding and early initiation of breastfeeding. Ten questions related to capturing breastfeeding counselling during pregnancy, and of those, nine used the last pregnancy as the recall period. Only four questions looked at counselling frequency, only four looked at the content of counselling and only a few looked at the providers or place of contact. Questions become broader and variability increases for questions related to continued breastfeeding.

Performance Monitoring and Accountability (PMA2020) has tested questions on timed and targeted breastfeeding counselling in large-scale surveys using four contact points (during an ANC visit, immediately after, within the first month of life and during a sick child visit) looking at messages received. A much higher proportion of mothers reported receiving information during pregnancy and delivery than during other time points. Responses from women on when they received information were similar to what was observed. Data were also collected by asking about content and aligning that with the types of messages that mothers should receive at different time points. However, only a small proportion of mothers receive all the recommended content about breastfeeding. These are valuable experiences to consider when designing counselling coverage questions.

A meeting of the WHO guidelines development group took place to discuss breastfeeding counselling, leading to six recommendations (addressing issues including: counselling for whom; timing; frequency; mode; provider; and counselling for anticipatory guidance), which will be published early next year. Monitoring compliance with the guidelines was also part of the discussions. It was emphasized that the definition of counselling interventions needs to centre on interpersonal communication, not just the delivery of information to the mother. The group concluded that while there is a need to collect data on counselling in health services, this may not be a good monitoring indicator due to concerns around the quality of reporting.

In a recent paper submitted by the Countdown to 2030 Nutrition Metrics Joint Working Group to the Lancet Global Health (Gillespie et al.), counselling coverage indicators were proposed, including one to capture the receipt of counselling and two for post-natal care focused on the first month.

The definition of counselling has been an ongoing measurement issue; the definition used in surveys is not ideal. The way forward would be to agree on minimum requirements, but we should not let the questions about definitions hold back the work, particularly since we currently have no information on population coverage. Certain questions around problem solving can help identify whether skilled

lactation support has been received, but these need to be practical enough to include in large-scale surveys. An expanded guidance document would offer insights into these elements in the context of programmes. WHO has two definitions of IYCF counselling – a process by which a health worker supports mothers and babies to implement feeding practices and overcome difficulties; and an interaction to address real or anticipated problems. These are not operationalized in terms of measurement.

Validation case studies are being developed in high implementation fidelity contexts. A stakeholder meeting will also be convened in mid-September 2018 prior to a household survey consultation planned by Alive & Thrive, USAID, DataDENT and the Gates Foundation. These activities will help establish consensus around coverage measurement, linked to WHO guidelines development process and is an example of aligned stakeholders making investments to take an issue of global interest forward.

Session 4: Technical report on anthropometry data quality

After the last TEAM meeting in November 2017, the anthropometry data quality document was reviewed and a second draft was produced in February 2018. A webinar was also held with anthropometry working group members and reviewers to gain clarity on pending issues. A third draft was circulated with outstanding issues that were addressed in a face-to-face meeting in Atlanta, USA, in June 2018. A new title was also agreed on: 'Recommendations for improving the quality of anthropometric data collection, analysis and reporting'.

A number of sessions took place during the Atlanta workshop. Some of the issues discussed included better characterizing non-respondents, assessment of bilateral ankle oedema, sampling, methodology for assessing the performance of anthropometry, quality checks during data collection, determining age, percentage cut-offs for missing data, and assessing data heaping. Issues identified for further research included: thresholds for data quality, WHO flags, distributions of anthropometric indicators, validation of event calendars to estimate age, technical errors of measurements and cut-offs to assess performance, taking more than one measurement, re-measurement during survey implementation and field workload.

Next steps and timeline: revision of the sampling section (August); review of cut-offs for technical errors measurements in the standardization of anthropometry (review in July for submission to the working group in August); redrafting of the section on quality assurance during data collection (review in August); review the data quality assessment section (August); prepare draft four; and review and finalize the document for editing (September/October 2018).

Points of discussion:

TEAM discussed how some of the unanswered questions on the anthropometry document had been pending for several years. From an operational standpoint, there are many inconsistencies around data collection and quality check steps not being recorded. A decision was taken by the working group to finalize the document with the knowledge available today, to avoid further delaying the guidance, which colleagues in the field need now. As such, the document will make recommendations for continued research and will eventually be updated.

There was a query about the distribution of Z-scores and cut-off points. There have been ongoing discussions on this issue and the working group is closer to reaching consensus on the language for the document. However, some questions still remain due to lack of data and the sections are being rewritten to adjust the language accordingly. The challenge of the process is in achieving consensus.

Some TEAM members noted that consensus may be impossible to achieve due to philosophical differences and hard choices would need to be made. Despite these differences, important

achievements had already been made, including an agreement from the three largest survey groups to move forward with the process. It was agreed that TEAM will need to decide what research is needed to inform decisions; what process will be taken to complete that work; and how decisions will be taken moving forward. It will be difficult to progress further without dedicated resources to support this work.

TEAM agreed that some of this work could be done by a consultant, with TEAM monitoring and taking decisions. Others noted that the inputs of DHS and others who know the data well was crucial. Some outstanding questions could also be tabled on TEAM's list of research questions. It was suggested that more statisticians be involved in the process to complement those with operational experience. Another suggestion was made to develop reporting guidance for researchers, to encourage them to document their approaches to anthropometry by reporting on certain defined criteria; this would address some of the variability in approaches and improve quality. Such criteria could be explored in a journal commentary, for example, which could identify what parts of the 1995 manual were still relevant and highlight new updates.

Session 5: Manual on nutrition information system

An update on the nutrition information system (NIS) manual was presented and TEAM was asked to provide feedback. The NIS manual was a request to UNICEF from countries, as there is currently no recommended list of indicators that should be collected by countries at various intervals and from various data sources. The current indicator list and reference sheet does not call for a population survey every five years, nor does it specify what information should be collected (including nutrition-sensitive data) and how that information should be triangulated. The intended audience of the NIS manual is countries and the organizations that support them, particularly those working on nutrition specific plans. The manual is intended to be short and user-friendly, with a focus not just on the indicators, but the systems needed to support them. At country level, the manual will help ensure that nutrition is covered within the working groups that exist at country level – for example, ensuring that nutrition is included when registers are reviewed. The goal is for a final product to be available by end of 2019.

The guidance needs to cover global indicators and context-specific indicators and examine how to match indicators to decisions. They will also need to consider how data flows up the chain to national level, references to audits or ways of assessing quality and infrastructure for data collection. The outputs section will need to look at what data is disseminated and how, which will include a decision-making calendar and guidance on the types of products applicable to different decision maker audiences. The manual will also address human resource capacity needed, financing and monitoring the system.

An example was also presented from Kenya to illustrate the “case study” approach being proposed. An article on Kenya's NIS has been published in Emergency Nutrition Network (ENN)'s journal Field Exchange.³

DHIS2 module for nutrition

An overview of the UNICEF-WHO DHIS2 module for nutrition was provided. DHIS2 is a software used in about 60 countries to aggregate data and generate standardized reports. The objective of developing a nutrition module is to influence those 60 countries, by defining a core set of standard routine data to collect for nutrition.

The nutrition indicators currently being recommended are only population-based surveys every five years, which are in many cases insufficient. UNICEF would like to integrate existing HMIS tools (e.g. patient health cards) and other registers (e.g. Child Health Days or immunization), looking at what information needs to be collected, recorded in the register and reported up to district or national level to determine progress and evaluate the uptake of programmes. An initial proposal is being discussed at

headquarters this month and input will be sought from focal point groups, WHO and other partners. A draft proposal will be ready by the end of the year for TEAM to review.

Points of discussion:

It was noted that Latin American countries have various information systems across different sectors, but no single platform for gathering and analyzing nutrition information from all sectors. These countries have been discussing initiatives to develop multisectoral platforms, including the National Information Platforms for Nutrition (NIPN), which could provide useful insights for the manual. NIPN is working in 10 countries now and the manual could be useful to support them as well.

There was some discussion about the need and demand from countries for such a manual. Some TEAM members felt that countries may already be able to provide case studies of their work on nutrition information systems, including how data is used for decision making. India, for example, is in the conceptualization phase of a new national information system.

In general, TEAM members felt the outline for the manual presented was well done and responded to the needs expressed by countries in previous meetings. Some TEAM members felt that the document should concentrate on nutrition-specific indicators, while others felt that food indicators at least should be included. It was noted that countries also use their data for advocacy, particularly when speaking across sectors and with the Ministry of Finance.

There were several points raised about the need for government ownership of the process to enhance country engagement and avoid parallel processes. Some TEAM members emphasized the importance of doing a thorough review with countries on how they are addressing the GNMF and the SUN MEAL framework, for example, to ensure that the guidance is aligned and supports their goals. It would also be important to review the HMIS using a nutrition lens to better understand country resources. Several TEAM members suggested that the guidance should be clear that it is intended to support national level processes, rather than provincial or local.

Reporting fatigue was mentioned, and there was concern that multiple data sources in the manual could appear confusing or burdensome. A suggestion was made to develop a 'decision tree' rather than a manual or other mechanism to support countries in decision-making around their advocacy and progress tracking goals. The process should be interactive, rather than descriptive, and allow for tying in country objectives with the most appropriate sources of data. Given the challenges in issuing generic guidance, a suggestion was made to develop 3–4 case studies (e.g. Mexico, Kenya, etc.) as a means of illustrating key principles with examples. A point was also made about the process for proposing and developing new indicators and which stakeholders from each sector need to be involved to ensure the process is coherent.

Many participants noted that the document could be delivered in user-friendly and accessible ways that go beyond a large written document. It could be made available online in an interactive format and it could also encourage the use of technology in data collection.

TEAM members agreed that a working group should revisit the points raised by the group and propose a way forward.

Session 6: Update on the revision of the IYCF indicators guideline

TEAM proposed minimum dietary diversity (MDD) as a process indicator for the GNMF. The inclusion of MDD in the GNMF brought new issues to the forefront. In June 2017, UNICEF and WHO in collaboration with FANTA/FHI 360, USAID convened a technical consultation on reconsidering, refining and extending the WHO IYCF indicators. The consultation considered issues with the existing complementary feeding

indicators, i.e., MDD, minimum meal frequency (MMF) and minimum acceptable diet (MAD); issues with existing breastfeeding indicators and potential new indicators for the 0–6 month age group and for continued breastfeeding; and potential new indicators for diet quality. A report⁴ of the consultation was issued.

The consultation redefined the MDD indicator to include breast milk. Breast milk was not included in the previous definition, meaning that non-breastfed children had an inappropriate advantage. It was particularly important to modify the definition when proposing it as a global indicator in the World Health Assembly (WHA) guidance that would be applicable to all countries. New operational guidance and a plan for communicating the change will be required.

A second consultation will be convened from 11–13 July, informed by background papers prepared on the new proposed indicators on breastfeeding, complementary feeding and dietary quality. Decisions will be taken on the proposed indicators and a strategy will also be required to communicate changes to the indicators and the operational guidance. The consultation will aim to cover: modifications to existing indicators; refining operationalization of indicators; identifying additional breastfeeding indicators to assess compliance with the recommended Ten Steps to Successful breastfeeding; creating additional complementary feeding and diet quality indicators; and reviewing the performance of MFF for non-breastfed children and alternate questions for children breastfed yesterday.

Points of discussion:

There was a question about whether the consultation would address data as it is collected now, or whether indicator revisions would lead to proposed changes in data collection. This will be a key point of discussion at the consultation: Some of the new indicators could be generated with data from existing questionnaires, some would involve minor modifications and others would require new questionnaires. The background papers on proposed new indicators do not recommend a lot of additional data collection.

There was some discussion about the usefulness of the MDD indicator, particularly in the absence of flesh foods in the diet. Animal source food indicators will be discussed during the consultation. There was also a suggestion to include maternal dietary quality in the list of future research questions.

Session 7: Diet quality indicators

The TEAM sub-group on diet quality metrics provided background on previous discussions, a framework to address ongoing work and gaps, an overview of ongoing initiatives and a plan for defining the working group's niche. Poor quality diets are among the most important causes of morbidity and mortality globally, yet there is a lack of global monitoring of diet quality due to limited global guidance, lack of clarity on definitions and a lack of routinely collected dietary data. TEAM has acknowledged the urgency of the issue but has not yet defined its role in these discussions.

To address gaps and recommend a global set of principles for healthy diets, the working group needs to look at concepts, indicators, data sources and frameworks. They will consider existing metrics, those under development and how indicators are included within existing or new NIS. Age is also a factor to consider. For infants and young children, diet quality will be discussed during the IYCF indicators consultation, mentioned during the previous session; and for older children, school-based platforms may be important and this work could dovetail with work on metrics for school-aged children and adolescents and with the NIS guidance. For adolescents, it will be important to consider the WHO Guideline: Implementing Effective Actions for Improving Adolescent Nutrition;⁵ and the Adolescent Nutrition Call to Action⁶, which emphasizes dietary quality, the drivers of adolescent food choices and metrics to capture them.

There are a number of ongoing initiatives to address dietary quality metrics in the general population. The EAT Lancet commission will deliver the first major scientific review of how to define healthy diets in light of food system sustainability, including recommendations for supportive actions, with a report expected in late 2018. The Gallup Diet Quality project will collect data via a module integrated within the Gallup World Poll, which is expected to yield several indicators, including MDD for women (MDD-W), a diet diversity score for all adults, and an indicator reflecting sentinel food groups related to dietary risks for NCDs. Cognitive testing was carried out and a pilot is planned for Brazil in 2018, with eventual scale up to 160 countries by 2021.

Other initiatives applicable to the general population include the Indicators of Affordability of Nutritious Diets in Africa project⁷ (IANDA), which has developed metrics of the cost of nutritious diets, with the aim of using existing national food price monitoring systems to track indicators on the cost of nutrient adequacy, the cost of recommended diets and the nutritious food price index. The project is currently being piloted in Ghana and Tanzania, by Tufts University, the University of Ghana and Sokoine University of Agriculture, Tanzania and the Changing Access to Nutritious Diets in Africa and South Asia (CANDASA) project will further expand this work. The *Intake* initiative, run through FHI 360, aims to increase the availability and use of high-quality dietary data. A request for proposals was issued for concept notes on the development of novel metrics (those not reliant on food composition data) for dietary quality in women of reproductive age in low- and middle income countries (LMIC), which would capture NCD risk and nutrient adequacy.

The Global Dietary Database⁸ is a compilation of information on food and nutrient consumption levels, aiming to capture global nutrition transition and produce reliable estimates of food and nutrient consumption worldwide. The database draws on multiple data sources, including 24-hour recall, food frequency, consumption and expenditure data, among others. An interactive online platform is under development. Related to this, is the FAO-WHO Global Food Consumption Tool (GIFT), a database of quantitative individual food consumption data intended to increase access to dietary information and indicators. The data are collected through nationwide and small-scale surveys. GIFT will include microdata and will be made available to researchers, with visualizations and indicators that can be compared across surveys and countries.

The International Dietary Data Expansion (INDDEX) project is a Gates funded initiative at Tufts University intended to increase the availability, access and use of dietary data. They are supporting FAO to tap into household consumption and expenditure data to derive household level access to nutritious foods. The aim is to finalize guidance to derive dietary and nutrient adequacy indicators from household survey data. An interagency working group is working to improve the structure of the consumption modules within household consumption and expenditures surveys.

The World Cancer Research Fund's NOURISHING framework provides a set of 10 recommended policy interventions to improve diets and reduce obesity and NCDs and a database that monitors policy interventions worldwide. Lastly, the Global Panel on Agriculture and Food Systems for Nutrition is an advocacy body for new metrics on diet quality, with an interest in improving regular collection of food intake data, better definitions of quality, women's roles in dietary choices, metrics of food environments and food systems and measuring access to food.

Next steps for the dietary quality metrics working group include a light landscaping exercise to collect the knowledge of working group members. The working group also developed an interview guide and will plan how to roll it out. The working group would like TEAM's feedback on these contributions and on other ways that TEAM could add value and prioritize activities in this realm.

Points of discussion:

WHO is working on developing more comprehensive guidelines on dietary quality and patterns to complement the WHO guidelines on macronutrients. Work is underway on sugar and sodium and consultations have taken place for draft guidelines on trans fat and saturated fats. A whole set of guidelines will be available within the next 18 months. Assessing the evidence for dietary patterns is challenging; WHO initially looked at social patterns beyond food (e.g. do you eat with your family) but is now looking at animal versus plant-based foods and the level of processing. Assessing the level of processing poses significant challenges. The concept of a healthy diet needs to be defined using a combination of approaches including sustainability. In this vein, the work done by the Lancet EAT commission is useful, particularly in defining a reference diet that could be defined without regional differences. A WHO and FAO technical meeting will develop background for that analysis, including recommendations based on nutrients and dietary patterns, to contribute to the development of indices or indicators, including needs for specific age sub-groups. WHO would welcome TEAM's engagement with these indices of healthy diet.

Participants generally agreed that it was an opportune time for TEAM to engage more directly in initiatives around diet quality. It was noted that most diet quality indices do not specifically reflect adequacy of intakes of amino acids or essential fatty acids. Some large diet quality indices do incorporate nutrient density, but amino and fatty acids have not been addressed.

TEAM discussed definitions and whether healthy diets were about not contributing to illness or rather about providing the nutrient needs required to sustain lifelong health. It will be important to consider the adequacy side and the overconsumption/NCD side of the equation. It was agreed that countries need the guidance and it was important for TEAM to take a position and begin acting now.

There was some discussion about the Gallup project and data storage and access. The proposal is for data to be housed outside of the UN system and outside of Gallup at a university and be fully open access.

Session 8: Modelling exclusive breastfeeding: updates

WHO and UNICEF have long recommended an indicator for exclusive breastfeeding (EBF) based on 24hr recall; however, many countries do not collect these data in the standard way (particularly high-income countries without DHS and MICS surveys). However, many of these countries do collect some data on EBF, specifically when a breastfed infant first received other liquids or solid foods. Ipsos, a consulting firm, carried out a study for WHO to determine if these retrospective data could be used to estimate the standard EBF indicator for those countries. Ipsos identified 42 studies with data collected both ways from the same population within the same time period. They modelled the dependent variable of 24hr recall for children 0–5 months and the explanatory variable with retrospective recall data for children 6 months and older calculated four different ways (the percentage of children exclusively breastfed at least 3 months, 4 months, 6 months and the average exclusively breastfed at each age from 1–6 months).

A number of issues were raised with the models during the last TEAM meeting. The model based on the average across the first 6 months was recommended by Ipsos. Questions were raised at the last TEAM meeting about whether the fit was good enough in the middle range of the data, whether the goodness of fit would be better with national level data only, whether a simpler model could be used, and whether R^2 was an appropriate measure of goodness of fit. TEAM also queried how many countries would be added to the global database if these model estimates were permitted.

On the first point, the R^2 is calculated differently without an intercept. The software package used provides a different answer when there is a forced intercept of zero, whereas statisticians may do it differently. Recalculating using a different software package provided a lower R^2 . Examination of the standard deviation of the residuals showed a large margin of error (about 20 percent). There was less dispersion when removing the provincial points from the estimates, but the goodness of fit was only slightly better. Twenty-two countries from the Global Health Observatory database could be added; it is not clear how many additional countries may be added after the rule is applied to all countries.

Points of discussion:

There were lengthy discussions about whether the estimates would be acceptable to use at global level, country level or neither. Most of the 22 country estimates were from Europe, suggesting that it might be possible to produce a regional average for Europe where one does not currently exist. A point was made that the modeled estimates would need to be applied to all countries, not only those in Europe, and therefore additional countries could be added. There were also questions about how much the addition of the 22 countries (or more) would impact the global estimate.

There was also concern about the quality of surveys that could be added, particularly in terms of survey response rates. The retrospective data from different countries may not be comparable given that there is no standard set of questions asked.

There was some discussion about the validity of the currently recommended exclusive breastfeeding indicator. Problems include small sample sizes and large confidence intervals. The standard exclusive breastfeeding indicator does not measure adherence to the WHO recommendation on continuing exclusive breastfeeding for the first six months. However, it does capture a practice that every child should be doing at a given age within the sample. Alternatives, such as reporting at 6 months, are problematic because of data heaping and recall bias. It would be good to strengthen the wording of the IYCF guide around the limitations of 24hr recall.

Models have been used to impute estimates of anaemia and adult obesity for countries without data. Models have been used to generate regional and global estimates of wasting, stunting and overweight. No such modeling has been done for exclusive breastfeeding. It would be helpful for TEAM to provide guidance on when models are appropriate.

Decision: TEAM members recommended not using the estimates from retrospectively reported exclusive breastfeeding.

Session 9: An agenda for TEAM research priorities

Before the last TEAM meeting, the Secretariat solicited suggestions for research questions from TEAM members and a list was produced, organized according to seven themes: global monitoring; monitoring, surveillance and evaluation systems at country level; understanding and monitoring policy and implementation processes and decisions; indicator thresholds and public health significance and action; methodological work related to existing indicators; methodological work and development related to new indicators; and miscellaneous.

Topics were voted and assigned to working groups: antenatal iron supplementation; breastfeeding counselling; anthropometry data quality; diet quality indicators; quality adjusted coverage indicators; annual prevalence data for countries and regions (coming from the Joint Malnutrition Estimates). There was uncertainty as to the role of the research questions working group now, and how the group was expected to continue adding value, given that other TEAM working groups were already generating/addressing research questions specific to their areas.

Points of discussion:

There was some discussion about TEAM's role in generating and responding to research questions related to nutrition monitoring. Some participants felt that there was no further role required of the working group, given that individual working groups were already responding to identified questions. Others mentioned that not all questions were covered by working groups, and TEAM's role should be to identify others to carry forward working on those remaining.

There was a suggestion for the research working group to collate the questions identified by other working groups and develop an outward facing statement or manuscript on behalf of TEAM on the topics it has identified as research priorities. The objective would be to raise awareness among the research community and inspire their interest to tackle some parts of the research agenda. There are also guideline development groups developing questions on some of these same topics, which has implications for TEAM's work. The New York Academy of Sciences and WHO produced a global research agenda for nutrition science in 2013⁹; TEAM could do something similar in developing a paper but using a simpler process.

The list of questions developed could also be an opportunity for graduate students. TEAM members often have access to data (something students want) or can leverage contacts and resources, even without specific funding. TEAM could also undertake targeted advocacy to groups and individuals to take up certain topics. In nutrition monitoring, the challenges around self-reporting, recall bias and social desirability bias are not being addressed systematically. It will also be necessary to address the research questions raised by the anthropometry research group.

There was general agreement that a journal article or other public facing document on research priorities was necessary. A point was made that the document should outline TEAM research plans for the next three years as well as the questions that will be important globally. A commentary in a journal would be citable, would remain in the literature and would speak to the right audience. It would also be important to link the priorities in the article to ongoing work by other groups doing monitoring research. A suggestion was made to use a framework to categorize the research questions, and that framework would be developing by the working group and used as an outline for the commentary. The commentary would also be an opportunity for TEAM to define what it means by nutrition monitoring and also call for greater investments.

Session 10: An introduction to Data for Decisions to Expand Nutrition Transformation (DataDENT) project

DataDENT is a four-year initiative funded by Gates Foundation involving global and country-level investments across the nutrition data value chain (including prioritizing what data to collect, to creating and collecting data, to curating data, to analysis, to translation and dissemination to decision making). DataDENT, led by Johns Hopkins, International Food Policy Research Institute (IFPRI) and Results for Development, aims to address gaps in nutrition measurement (particularly coverage measurements), impact advocacy and advocate for stronger nutrition data systems. Advocacy is about encouraging the uptake of new indicators and stronger methods to generate better data and fill gaps.

DataDENT involves three workstreams: the first supports progress tracking of priority indicators in countries and regions, annual reporting on indicators and exploring the potential of data visualization tools; the second involves data advocacy and the development of public goods for nutrition measurement; and the third involves conducting targeted research to fill measurement and data use gaps. Ongoing DataDENT activities relevant to TEAM include: 1) review of nutrition data visualization tools at global level (e.g. GNR profiles); and 2) a global consultation in September sponsored by the

Gates Foundation, USAID and others on nutrition in household surveys that aims in part to support a more coordinated appeal for revisions to the DHS core questionnaire. DataDENT is also a member of the joint informal working group on nutrition metrics, initiated by the Countdown to 2030 who co-authored a forthcoming manuscript about nutrition measurement. Targeted measurement research is underway and advocacy for change in nutrition policies and indicators to assess them.

DataDENT engages with TEAM, has cross-cutting membership and carries out technical work that directly supports the TEAM work plan.

Points of discussion:

The Secretariat noted that TEAM members would be invited to share their institutions' work during future TEAM meetings.

WHO is changing its data visualizations for the Global Health Observatory; it would be good to collaborate with DataDENT. WHO has worked extensively on MNCH scorecards to ensure the right data sources and are now working with UNICEF to expand the Countdown 2030 profiles to all LMIC. Country profiles are being requested in response to specific needs (e.g. a focus on newborn health) and many countries are demanding interactive capacities.

The household survey consultation will convene small groups to create recommendations about what should be measured in household surveys. Working group chairs will be identified for each session of the consultation. NCD indicators will be considered for each topic.

Action: Rebecca to put Theresa Diaz, Coordinator of the Epidemiology, Monitoring and Evaluation unit of the Department of Maternal, Newborn, Child and Adolescent Health (MCA) from WHO in touch with Results for Development.

Session 11: Quality adjusted coverage indicators

The presentation was adapted from the work of Agbessi Amouzou of Johns Hopkins and his group. Quality adjusted coverage is the extent to which the health care services provided to individuals and populations improve desired health outcomes. Effective coverage implies that quality services were received among the population in need, with the intended health gains. Quality adjusted coverage is one component of effective coverage.

Coverage has been quality adjusted by some research groups using a proxy for quality of care. For example, a group at Harvard is adjusting coverage metrics either by linking population coverage with health facility-based quality data; or, by linking population measured coverage with quality related adjustments based on what survey respondents say about the content of services received. Assessments may also be involved to observe the quality of care.

Work on quality adjusted coverage, defined by the receipt of eight antenatal components, has been carried out in Nigeria, Ethiopia and India, showing very low effective coverage. For vitamin A deficiency, quality adjusted coverage is more about user-adjusted outcomes, such as the proportion of children who have inadequate vitamin A intake and achieve dietary adequacy. The Tanahashi framework is also useful. Agbessi Amouzou and his group are using the framework to bring in other elements of user-adjusted and quality adjusted coverage.

TEAM should consider how this body of work relates to the research agenda and the implications for TEAM's work. The next TEAM meeting could include an invited lecture from Agbessi or the Harvard group.

Points of discussion:

GAIN has used Tanahashi as a framework for its work on fortification programmes, with effective coverage defined as the consumption of fortified foods when they are adequately fortified. Other groups use the effective coverage terminology differently, and TEAM could play a role in creating some clarity and consensus around this terminology issue.

There was a question about whether TEAM could still provide feedback to the Johns Hopkins group around the Tanahashi framework work. It may still be possible for TEAM to provide inputs, if they are delivered quickly. A suggestion was made for one or two people to review the current version and make comments.

Actions: Chika to reach out to Agbessi. Lynnette Neufeld will assemble a group to respond to the proposed framework and share GAIN's definitions of effective coverage.

Session 12: The UNICEF-WHO-WB Joint Malnutrition Estimates (JME)

UNICEF and WHO reviewed the JME work and sought feedback from TEAM on the work that will be done on modelling estimates. Since 2011, the agencies have been harmonizing data and methodology for regional estimates and for countries, working with countries one-on-one to consider quality issues. The methodology for analyzing surveys was improved and an online tool and updated macros were made available for countries to use. Country and regional workshops offer training on survey data analysis and data quality assessment. UNICEF and WHO have been working to increase the availability of disaggregated estimates in the databases. An expanded dataset includes disaggregation by sex and age, wealth quintile, mothers' education, geographic area and area of residence (urban/rural).

Minimum review criteria for the data includes representativeness, response rate, measurement devices and techniques, analysis, trend line and final report status. Additional criteria will be considered once the required sections of the data quality report are completed in the next phase. The JME provides standardized approaches and harmonized estimates and feeds into global tools.

Some country-level modelling work has taken place on annualized time series for stunting and overweight. A proposal has been made to bring Alex McLain, an expert in modelling, on board to work on this further ahead of a consultation being planned tentatively for November. TEAM was asked to think of country resource people who could attend the consultation and help provide insight on implications of such modelled estimates for countries.

Points of discussion:

There was some discussion about how the JME group interacts with SUN countries; this collaboration occurs based on request. SUN countries are aware of the JME and the Global Nutrition Targets tracking tool but the JME group does not directly support their monitoring. There is a new WHO metrics group, but it is not clear exactly how it will function.

A point was made about the importance of engaging with countries. A selling point for modelled estimates for countries is less about comparisons with others and more about filling gaps between survey periods. Some participants queried whether there had been any pushback from countries where there were discrepancies between modeled estimates and survey estimates. While nothing has been released for the stunting and overweight work, a consultation in Africa in 2016 presenting the modelled estimates held by World Bank and the consultants indicated interest from country government participants. There is a lot of pressure to use modelled estimates to fill global gaps and project into the future; however, it will be important to ensure that modelled estimates do not encourage countries to become lax about collecting regular data. The under-5 mortality group and the water, sanitation and

hygiene (WASH) group have modelled estimates and do technical support visits with countries to explain their methods and this has been an opportunity for dialogue.

Session 13a: Nutrition of school-aged children and adolescents

Globally, there has been insufficient investment in nutrition during middle childhood, early adolescence and adolescence; there is also a paucity of nutrition data on these age groups. The prevalence of overweight and obesity is high in these groups. From SPRING's systematic review on diet and eating practices in adolescent girls in LMIC, around 50 percent of adolescent girls do not eat three meals a day. For the first time, UNICEF is explicitly addressing the prevention of overweight and obesity in its four-year organization-wide Strategic Plan

UNICEF would like to establish a technical advisory group with the following objectives: to convene experts; to summarize the state of knowledge and identify gaps; to develop a monitoring framework; and to support the development of tools to help in understanding determinants of dietary practices. UNICEF is approaching groups to join and has solicited TEAM's ideas on potential group members.

Points of discussion:

There was agreement that some TEAM members should review the documents and join the working group. Experts in adolescent nutrition measurement were particularly needed to join the group, and Alison from GAIN was suggested as a possible member. Participants discussed catch up growth, and how to address this challenging issue. A suggestion was made to also look for a member with experience in maturation.

Action: Edward Frongillo will join the adolescents working group and also suggested the name of a colleague who works with adolescents in Zimbabwe as a potential member. As suggested by Lynnette Neufeld, Chika will contact Alison Tumilowicz from GAIN.

Session 13b: The UNICEF IYCF Global Database

The IYCF global database was established in the 1990s. A rigorous process takes place each year where country offices submit the latest nutrition data and data on hundreds of other MNCH indicators. The database was revamped in 2017, and now includes time trends and disaggregation such as place of birth, wealth status, sex, etc., and for the first time, the revised MDD and MAD estimates based on the 2017 indicator definition revision. The current database holds more than 500 data points. By the end of 2018, the database will be further expanded with additional indicators and disaggregation.

DHS and MICS are the key data sources, while surveillance and administrative data are not included due to lack of documentation and lack of representativeness. Data quality checks are carried out and data points reviewed. Data to be included needs to be nationally representative and must include documentation about sampling methodology. The sampling frame cannot be older than 10 years and there must be an adequate response rate. UNICEF also reviews the questionnaires to see how they align with the standard questionnaire. IYCF area graphs are important and can often raise flags about data collection that need to be further investigated.

UNICEF would like to convene a technical advisory group on the IYCF database with the objective of reviewing the current data quality criteria for acceptance into the database.

Points of discussion:

The global database is an impressive piece of work and an effort for UNICEF to be more transparent about its work. The need for more focused guidance was raised as well as the need to involve someone with expertise in surveying or sampling during emergencies

Mary Arimond is included from TEAM, but it was suggested that someone from DHS should also be included in the sub-group.

Session 14: TEAM engagement with other groups working on global nutrition monitoring

There are a number of entities working on nutrition metrics/monitoring and TEAM should consider how to engage with them. Some of these groups include the Joint Information Working Group on Nutrition Metrics, Global Open Data for Agriculture and Nutrition, Global Nutrition Report, No Wasted Lives Coalition, Institute for Health Metrics and Evaluation, the SUN MEAL framework, etc.

TEAM was asked to discuss: 1) What groups were missing? 2) What additional information was required about these groups? 3) Which groups are the highest priority? 4) What are potential modes of engagement (e.g. networking, coordination, cooperation, collaboration and integration)?

Points of discussion:

There was a request for TEAM to identify the purpose for engaging with these different groups. It was recommended that TEAM limit its engagement to 3–4 groups given that UNICEF and WHO were already involved with most of the groups identified. The Health Data Collaborative is a partnership of all agencies interested in health data with a secretariat at WHO. They are developing modules, including one on nutrition, that may be used to update household surveys. One of the best ways to engage with the different groups is for TEAM to have a clear write-up about the work it is doing in a format that is easy to share; then other groups can see how their work relates.

Session 15: TEAM Workplan

TEAM discussed each item on the work plan and whether or to what extent the work should continue.

Workplan item	Decisions/Actions/Outputs	Notes
IFA supplementation indicator	<ul style="list-style-type: none"> TEAM Secretariat to contact Sarah Wuehler from Nutrition International about joining the TEAM sub-group as an external member. WHO/UNICEF to clarify resources available for a secondary analysis and/or continued work on an improved IFA supplementation indicator Rebecca Heidkamp would like to hand-over leadership of the group; Rafael Flores-Ayala to send an email to the working group to solicit a new volunteer lead 	Lead: Rebecca Heidkamp (until a replacement is identified)
Breastfeeding counselling indicators	<ul style="list-style-type: none"> Some of the assessment work has already been done by Alive & Thrive and DataDENT There will be a Joint Consultation On Survey-Based Approaches To Measure Coverage Of Nutrition Counselling Interventions, co-organized by Alive & Thrive & DataDENT with TEAM 	<p>Leads: Purnima Menon and Rebecca Heidkamp</p> <p>TEAM Secretariat will participate in the consultation</p>
Nutrition professional	<ul style="list-style-type: none"> Report is currently under internal review; Secretariat to follow up on the layout design 	Only electronic version of the report will be published

Workplan item	Decisions/Actions/Outputs	Notes
indicator	<ul style="list-style-type: none"> and upload of the final document on the TEAM website Keep this indicator in the TEAM workplan 	
Extended set of GNMf indicators	<ul style="list-style-type: none"> WHO to clarify whether the work on an extended set of GNMf indicators should continue Assess where the GNMf core and extended indicators fit or align with the SUN MEAL framework and other indicators 	Discuss in the next TEAM meeting
Anthropometry data quality	<ul style="list-style-type: none"> Feedback on the manual to be received by August and finalized in September Working group to share the final document with TEAM; a few members will identify the sections they can peer-review 	<p>Lead: Rafael Flores-Ayala</p> <p>Elisa to send table of contents to TEAM; peer review will be done by sections - Mary, Ed and Lynnette to review</p>
Guidance or manual on NIS	<ul style="list-style-type: none"> TEAM sub-group to continue their efforts, based on TEAM suggestions Agreement that the document should be more about a set of principles or guidance than a manual TEAM sub-group to develop a concept note and share with all TEAM 	Lead: Rebecca Heidkamp Jennifer Coates and Omar Dary will join the working group
Diet quality indicators	<ul style="list-style-type: none"> TEAM sub-group to continue meeting and engaging with other groups working on the same issues TEAM sub-group to initiate a light landscaping of knowledge/experience on the topic 	Leads: Jennifer Coates and Mary Arimond Lynnette Neufeld to join the working group
TEAM research priorities	<ul style="list-style-type: none"> TEAM sub-group to consider the ideas discussed during the meeting and report back during the next TEAM meeting TEAM sub-group to compile research questions from all sub-groups in one place TEAM sub-group to discuss the proposal to write a commentary piece develop an outline to be shared with TEAM 	Lead: Edward Frongillo
TEAM's global engagement	<ul style="list-style-type: none"> TEAM sub-group to re-assess the landscape, prioritize groups to engage with, consider modes of engagement and how to communicate TEAM's research questions TEAM should review its terms of reference, mission and vision as part of the agenda of the next TEAM meeting Secretariat to draft a 2-pager explaining TEAM's current and previous work and objectives 	<p>Lead: Purnima Menon</p> <p>A stakeholders meeting may be organized along with the next TEAM meeting focusing on a specific theme</p>
Quality adjusted	<ul style="list-style-type: none"> Chika and Lynnette to communicate with 	Lead: Lynnette Neufeld

Workplan item	Decisions/Actions/Outputs	Notes
coverage indicators	Agbessi Amouzou with feedback on the Tanahashi framework <ul style="list-style-type: none"> Consider how TEAM could publish an article on terminology around effective coverage 	Consider inviting Reina Engle-Stone to join the group
Modelling exclusive breastfeeding	<ul style="list-style-type: none"> TEAM agreed that modelled estimates should not be used in the global database nor for a regional estimate 	
Nutrition for school-aged children and adolescents	<ul style="list-style-type: none"> Edward Frongillo and Trevor Croft or someone from DHS to join the technical expert group being convened by UNICEF 	Lead: UNICEF Consider potential overlaps with the diet quality group
Joint malnutrition estimates (JME)	<ul style="list-style-type: none"> Have some experts present to TEAM (e.g. on low birth weight) 	Lead: Edward Frongillo
IYCF database	<ul style="list-style-type: none"> Working group to include Mary Arimond, Faith Thuita, Wenhua Zhao and someone from DHS 	

Working modalities for TEAM: These were discussed and the Secretariat was requested to arrange regular sub-group calls, in consultation with the group leads (including identifying dates, setting up calendar invitations, etc.)

Session 16: TEAM leadership/membership for the next two years

The Secretariat solicited nominations for TEAM Co-chairs in the lead up to the meeting. TEAM members were asked to vote and the Secretariat would communicate the vote outcome via email.

Eline Korenromp has been a member of TEAM since the beginning and will complete her tenure this year. The Secretariat and Co-chairs thanked her for her contributions to the TEAM activities during her membership period.

The next TEAM meeting will take place in December 2018 or January 2019. The Secretariat will circulate an email with possible dates.

Closing remarks

On behalf of the Secretariat, Chika Hayashi and Kuntal Kumar Saha thanked TEAM members for contributing their valuable time and expressed appreciation for TEAM's work and engagement, particularly the contributions made towards the development of global documents. On behalf of TEAM members, Faith Thuita offered kind words for the outgoing Co-chairs, Rafael Flores-Ayala and Mary Arimond, for their leadership in helping TEAM make important achievements during its initial years.

Rafael Flores-Ayala and Mary Arimond thanked the group and reflected on their time as TEAM Co-chairs. They said it was a pleasure to lead the group, and they had aimed to share that leadership and work in partnership. They had appreciated the willingness of colleagues to contribute and looked forward to continuing TEAM's work together.

Annex I: Background of the previous TEAM meetings

The **first TEAM meeting** was held in July 2015 in Geneva, Switzerland, and a workplan for the first two years drafted with six main work areas: (i) WHA nutrition target operational guidelines; (ii) prevalence ranges for malnutrition (stunting, wasting and overweight); (iii) Rules for assessing progress towards achieving the six WHA nutrition targets; (iv) anthropometry data quality; (v) a research agenda for global nutrition monitoring; and (vi) engagement with other partners.

The **second TEAM meeting**, held in New York in February 2016, consisted of an open half-day session with invited partners and a closed session of one and a half days for TEAM members. In the first session, the WHO-UNICEF Secretariat briefed partners on the structure and functions of TEAM and modalities of partner engagement. Partners provided input on priorities as well as modalities for their engagement. In the closed TEAM meeting session, work progress on items pertaining to the drafted two-year work plan was presented and discussed, and the work plan was finalized taking into consideration partners' inputs. The reports on the partner session¹⁰ and the 2nd TEAM meeting¹¹ were shared with all concerned and are available on the TEAM website.

The **third TEAM meeting** was held in September 2016 in Geneva, Switzerland. Updates were provided on all ongoing activities in the TEAM workplan. The concept notes and/or terms of reference on iron and folic acid (IFA), minimum acceptable diet (MAD), trained nutrition professionals and breastfeeding counseling indicators were discussed. It was agreed that the calls for consultants for IFA, MAD and trained nutritional professionals would be finalized and advertised by the TEAM Secretariat. It was decided that the TEAM working group working on breastfeeding counseling indicator would revise the concept note including a recommendation for an interim indicator. Other activities discussed were rules for tracking WHA global nutrition targets, and prevalence level ranges for stunting, wasting and overweight. The timelines for the activities were updated based on the current progress. A report¹² on the 3rd TEAM meeting is available on the TEAM website.

The **fourth TEAM meeting** was held in March 2017 in Geneva, Switzerland. TEAM reviewed progress and next steps towards finalizing interim indicators for IFA, MAD, trained nutrition professionals and breastfeeding counseling, and agreed on prevalence levels for wasting, overweight and stunting. Other activities discussed were operational guidance for GNMF indicators, the anthropometry data quality report, and methods and estimates for low birthweight, stunting and overweight. TEAM was also updated on the work on modeling exclusive breastfeeding rates using retrospective data. A mapping of ongoing nutrition monitoring activities was presented, and the group discussed other research priorities for TEAM, outside of its work on the GNMF. A draft workplan for 2018-2019 was discussed and it was decided that the workplan would be finalized in the next TEAM meeting.

The **fifth TEAM meeting** was held in New York in November 2017. TEAM agreed to develop an outline for a manual on nutrition information systems and establish a working group on diet quality indicators. Work continued to develop a manual on anthropometric data quality and addressed new questions around the GNMF indicators, including on iron supplementation and breastfeeding counselling. The group also discussed research priorities for TEAM and agreed to map potential opportunities for engagement with other partners.

Annex II: Agenda

6th Meeting of the WHO-UNICEF Technical Expert Advisory Group on Nutrition Monitoring (TEAM)

WHO Headquarters, Geneva, Salle C (Main Building, 5th floor),
09-10 July 2018

PRELIMINARY AGENDA

Monday, 09 July		
9:00 am-9:30 am	Welcome and introductions <ul style="list-style-type: none"> - Opening remarks - Objectives and expected outcomes of the meeting - Introduction of participants - Administrative issues 	Kuntal Kumar Saha Chika Hayashi
9:30 am-10:00 am	Session 1: WHO's work on global nutrition	Francesco Branca
10:00 am-10:30 am Tea/Coffee		
10:30 am-11:15 am	Session 2: Validation of antenatal iron supplementation indicator – current status and future plan	Presenters: Rebecca Heidkamp Facilitator: Lynnette Neufeld
11:15 am-12:00 pm	Session 3: Developing, testing and validating BF counseling indicators – current status and future plan	Presenter: Purnima Menon/ Rebecca Heidkamp Facilitator: Kuntal Kumar Saha
12:00 pm-1:00 pm Lunch		
1:00 pm-2:00 pm	Session 4: Technical report on anthropometry data quality – current status and next steps	Presenter: Elisa Dominguez/Julia Krasevec Facilitator: Rafael Flores-Ayala
2:00 pm-2:45 pm	Session 5: Modeling exclusive breastfeeding: updates	Presenter: Larry Grummer-Strawn Facilitator: Eline Korenromp
2:45 pm-3:00 pm	Session 6: Update on revision of IYCF indicators guideline	Mary Arimond/ Trevor Croft
3:00 pm-3:30 pm Tea/Coffee		
3:30 pm-4:15 pm	Session 7: Manual on nutrition information system	Presenter: Rebecca Heidkamp/ Faith Thuita Facilitator: Wenhua Zhao
4:15 pm-5:00 pm	Session 8: Update on diet quality indicators	Presenter: Jennifer Coates Facilitator: Mary Arimond
7:30 pm	Group dinner	Specifics to be provided

Tuesday, 10 July

9:00 am-10:00 am **Session 9:** An agenda for TEAM research priorities – updates and future plan
Presenters: Edward Frongillo
Facilitator: Omar Dary

10:00 am-10:30 am Tea/Coffee

10:30 am-11:15 am **Session 10:** Quality adjusted coverage indicators – plan of action
Presenters: Purnima Menon
Facilitator: Rebecca Heidkamp

11:15 am-12:00 pm **Session 11:** Joint malnutrition estimates (JME)
Presenter: Chika Hayashi/ Elaine Borghi
Facilitator: Edward Frongillo

12:00 pm-1:00 pm Lunch

1:00 pm-1:45 pm **Session 12:** Nutrition of school-aged children and adolescents & UNICEF IYCF database
Presenter: Chika Hayashi/Vrinda Mehra
Facilitator: Mary Arimond

1:45 am-2:30 pm **Session 13:** Liaison and engagement with other groups working on global nutrition monitoring
Facilitator: Rafael Flores-Ayala

2:30 pm-3:00 pm **Session 14:** Update of TEAM workplan 2018-2019: Identify activities and resource persons for each topic
Facilitators: Mary Arimond/Rafael Flores-Ayala

3:00 pm-3:30 pm Tea/Coffee

3:30 pm-4:15 pm **Session 14 (contd.)**
Update of TEAM workplan 2018-2019: Identify activities and resource persons for each topic
Facilitators: Mary Arimond/Rafael Flores-Ayala

4:15 pm-4:45pm **Session 15**
TEAM leadership/membership for next two years
TEAM Co-Chairs and Secretariat

4:45 pm-5:00 pm Closing remarks
Chika Hayashi
Next TEAM meeting dates
Kuntal Kumar Saha
Wrap up

Annex III: List of Participants

6th Meeting of the WHO-UNICEF Technical Expert Advisory Group on Nutrition Monitoring (TEAM)

WHO Headquarters, Geneva, Salle C (Main Building, 5th floor),

09-10 July 2018

List of Participants

TEAM Members

1. Rafael Flores-Ayala – Chair
2. Mary Arimond – Co-Chair
3. Trevor Croft – Member
4. Omar Dary – Member
5. Rebecca Heidkamp – Member
6. Eline Korenromp – Member
7. Purnima Menon – Member
8. Lynnette Neufeld – Member
9. Faith Thuita – Member
10. Edward Frongillo – Member
11. Jennifer Coates – Member
12. Wenhua Zhao – Member

TEAM Secretariat (WHO)

1. Francesco Branca
2. Kuntal Kumar Saha
3. Elaine Borghi
4. Larry Grummer-Strawn
5. Elisa Dominguez

TEAM Secretariat (UNICEF)

1. Chika Hayashi
2. Julia Krasevec
3. Vrinda Mehra

Observers

1. Rahul Rawat – Bill and Melinda Gates Foundation
2. Julia D'Aloisio – Rapporteur/report writer

Annex IV: Group photo



From left to right, Standing: Trevor Croft, Vrinda Mehra, Julia Krasevec, Chika Hayashi, Lynnette Neufeld, Edward Frongillo, Omar Dary, Eline Korenromp, Rebecca Heidkamp, Kuntal Kumar Saha, Jennifer Coates, Wenhua Zhao, Elaine Borghi, Faith Thuita, Elisa Dominguez, Rahul Rawat. ***Sitting:*** Rafael Flores-Ayala and Mary Arimond.

Endnotes

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- ¹ Terms of Reference for the WHO-UNICEF Technical Expert Advisory Group on Nutrition Monitoring (TEAM), Draft 24 February 2015.
- ² The process included a scoping exercise among eight diverse countries (Nepal, India, Philippines, China, Nigeria, Senegal, USA, Mexico), including desk review and interviews with global stakeholders. For further details, please see the 5th TEAM meeting report, December 2017.
- ³ See: <https://www.enonline.net/fex/55/nutinfosystemlessonskenya>
- ⁴ Available online: <https://data.unicef.org/wp-content/uploads/2017/11/IYCF-consultation-report-1.pdf>
- ⁵ See: <http://www.who.int/nutrition/publications/guidelines/effective-actions-improving-adolescent/en/>
- ⁶ See: <https://www.spring-nutrition.org/about-us/news/adolescent-nutrition-call-action-better-data-now-drive-better-policies-and-programs>
- ⁷ See: <http://ianda.nutrition.tufts.edu/>
- ⁸ See: <https://www.globaldietarydatabase.org/the-global-dietary-database-measuring-diet-worldwide.html>
- ⁹ See: <http://www.nutritionresearchagenda.org/pdf/Sackler-Agenda-121313-WEB.pdf>
- ¹⁰ Report on The Joint session of WHO-UNICEF Technical Expert Advisory Group on Nutrition Monitoring (TEAM) with Partners, 4 February 2016, UNICEF House, 3 UN Plaza, NY, USA.
- ¹¹ Report on the Second Meeting of the WHO-UNICEF Technical Expert Advisory Group on Nutrition Monitoring (TEAM), 4-5 February 2016, NY, USA. March 2016
- ¹² Report on the Third Meeting of the WHO-UNICEF Technical Expert Advisory Group on Nutrition Monitoring (TEAM), 15-16 September 2016, Geneva, Switzerland, October 2017.