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

Meeting report
15 June 2020

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Acronyms

ANC	Antenatal care
CDC	Centers for Disease Control and Prevention
CODA	Conditional on-demand assistance
DataDENT	Data for decisions to expand nutrition transformation
DFID	United Kingdom Department of Foreign Affairs
DHS	Demographic and Health Surveys
GNC	Global Nutrition Cluster
GNMF	Global Nutrition Monitoring Framework
HMIS	Health management information system
IFA	Iron and folic acid
IFPRI	International Food Policy Research Institute
IHME	Health Metrics and Evaluation
IMPROVE	Improving measurement and programme design project
IYCF	Infant and young child feeding
JME	Joint child malnutrition estimates
LMIC	Lower-middle income country
MAD	Minimum acceptable diet
MDD	Minimum dietary diversity
MDD-W	Minimum dietary diversity for women
MICS	Multiple Indicator Cluster Surveys
MIYC	Maternal, infant and young child
MMF	Minimum meal frequency
NCD	Noncommunicable diseases
NHANES	National Health and Nutrition Examination Survey
NIS	Nutrition information systems
NI	Nutrition International
PMA	Performance monitoring and accountability
SAM	Severe acute malnutrition
SARA	Service assessment and readiness
SDGs	Sustainable Development Goals
SMART	Standardized Monitoring & Assessment of Relief & Transitions
SPA	Service provision assessments
SUN	Scaling Up Nutrition
TAG	Technical Advisory Group
TEAM	Technical Expert Advisory Group on Nutrition Monitoring
UNICEF	United Nations Children's Fund
USAID	United States Agency for International Development
VNMS	Vitamin and Mineral Nutrition Information System
WHA	World Health Assembly
WHO	World Health Organization

Background

In 2015, WHO and UNICEF established an independent Technical Expert Advisory Group on Nutrition Monitoring (TEAM) to advise on enhancing global nutrition monitoring at all levels. 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). Since then, TEAM has worked to identify and address emerging research questions and needs related to nutrition monitoring. More information on TEAM and its activities is available at <https://www.who.int/nutrition/team/en/>.

This report provides a summary of discussions, recommendations and decisions stemming from the TEAM meeting, held virtually on 15 June 2020. The meeting was organized as an alternative to the planned in-person meeting and condensed into four hours instead of the usual two days. The agenda and list of participants are included in Annexes I and II.

Summary of presentations and discussions

TEAM co-chairs Edward Frongillo and Jennifer Coates opened the meeting and welcomed participants. Kuntal Saha and Chika Hayashi of the TEAM Secretariat thanked former member Trevor Croft for his contributions to TEAM and welcomed new member Sorrel Namaste.

WHO: New challenges for food and nutrition surveillance and the role of TEAM

Francesco Branca reflected on TEAM's support and contributions to the work of the World Health Organization (WHO) in previous years. He outlined some possible future areas of collaboration, such as TEAM's participation in the review of Global Nutrition Monitoring Framework (GNMF) indicators. This could include making recommendations to the WHA to add or remove indicators (e.g., obesity indicators based on waist circumference and waist/hip ratio or body mass index, and vitamin and mineral biomarkers).

TEAM could also consider engaging with WHO, UNICEF and other partners in modelling and developing estimates on the impact of the COVID-19 pandemic on nutrition. There is an ongoing discussion with partners around modelling disaggregated data to review the methodology for global estimates. There are also opportunities for TEAM to contribute to innovations and technology, such as the nutrition-related data from mobile applications, the World Food Programme's SCOPE-CODA¹ (Conditional On-Demand Assistance) initiative, or nutrition data from the WHO 'Google Fit' collaboration. A final opportunity would be for TEAM to complement the work of the WHO Strategic Technical Advisory Group of Experts for Maternal, Newborn, Child and Adolescent Health and Nutrition, by advising on actions related to nutrition surveillance and data collaboration.ⁱ

UNICEF: Update and work related to COVID-19

Chika Hayashi of UNICEF reviewed key areas of work in nutrition monitoring, including the global databases on maternal and child nutrition, methodological development, global reports and support to countries. Of note is that UNICEF continues to update all its global nutrition databases with the latest time series data and disaggregation. UNICEF will also be working to expand its infant and young child feeding (IYCF) database and begin updating the low birthweight estimates database.

¹ SCOPE is WFP's beneficiary information and transfer management platform.

With the support of TEAM, UNICEF is working to finalize some key methodological contributions, such as country level modelling of Sustainable Development Goal (SDG) 2.2, guidance on administrative data and a standard DHIS2 nutrition module, and the nutrition information systems guide. Some innovations are also being piloted, such as a digital height board, and data collaborations on overweight with University of Edinburgh are underway related to better capturing diet data. While there is currently no TEAM advisor for this work, TEAM may consider being involved moving forward. UNICEF is also leading work to establish a technical advisory group on metrics for the nutrition of school-age children, adolescents and women, and planning to advance measurement work in the areas of child food insecurity, child food environments, wasting time trends, increased data visualization, and innovations to better capture nutrition data on anthropometry.

UNICEF released new global reports in 2019 and 2020, such as a report on low birthweight estimates and the *State of the World's Children* report on children, food and nutrition. The new Joint Malnutrition Estimates were published in March 2020. UNICEF is also developing a new report on complementary feeding as well as an annual IYCF snapshot brochure. The background work and contributions of TEAM are reflected in these reports and in the data disseminated for advocacy and programming. Continued technical support is being provided across countries and regions on nutrition data collection, analysis and use.

The workplan of the UNICEF Nutrition Data Analytics and Innovation team was adjusted this year to address data and monitoring work related to the COVID-19 pandemic. The advocacy part of this work involves quantifying the impact of COVID-19 and advocating for nutrition to be high on the response agenda. UNICEF developed a quarterly questionnaire for country offices to report on service disruptions and mitigation responses. To minimize the impact of service restrictions and inform strategies, modelling work is underway with regions and countries as well as discussion with other partners on modelling nutrition outcomes. UNICEF is also beginning some analytical work to map nutrition vulnerabilities related to COVID-19 and may seek TEAM input on a modelling tool for country use to harmonize and more comprehensively model different responses (for COVID-19 and beyond).

UNICEF also plans to convene a meeting of experts, researchers and practitioners to examine data from COVID-19 patients. TEAM could make an important contribution to the strategy on pandemic-related data collection, as many initiatives are underway within countries. This might involve developing a set of nutrition-related questions that could guide the national data collection already taking place. UNICEF is also interested in monitoring post-COVID transition, including summarizing best practices for programming and developing resilient nutrition data strategies. TEAM may want to consider drafting a commentary or guidance note on some of these issues.

Session 1: Antenatal iron supplementation indicator – updates and next steps

Sara Wuehler provided an update on progress towards developing and validating an iron and folic acid (IFA) supplementation indicator. Two complementary TEAM reviews have now been published by WHO and UNICEF: a 2018 review of available maternal iron indicators and questions; and a 2019 review of country use of iron indicators.ⁱⁱ

Three IFA indicators are currently recommended: (1) The GNMF survey-based indicator (the proportion of women who consumed any iron-containing supplements during the current or past pregnancy, within the last two years); (2) the Demographic and Health Survey-8 (DHS-8) indicator (the proportion of women who consumed [any, at least 90] iron-containing supplements during the most recent pregnancy, in the last three years); and (3) the DHIS2 indicator (proportion of ANC visits in which women

were covered by iron-containing supplements); however, the DHIS2 indicator is still under discussion. This last indicator would include 'receipt' of at least 90 iron-containing supplements, and the term 'covered' would mean that the recipient is given enough supplements to last until the next antenatal care (ANC) visit.

Planned research in Nepal has been delayed due to COVID-19. Qualitative research was conducted by Nutrition International in Senegal and Bangladesh using cognitive interviews with women. Respondents had difficulty differentiating the timing of receipt by trimester. Many said they could remember the number of tablets consumed but could not describe how they remembered that number, limiting the researchers' confidence in reporting this number. There were also problems in Senegal with translating the questions to local languages.

The researchers also sought feedback from enumerators in Bangladesh on their interviews with postpartum women. Responses considered unreliable (without additional context) included (1) number of days iron was consumed; and (2) trimester during which iron was consumed. Responses considered reliable included (1) number of months iron was consumed; (2) whether iron was discontinued or continuous; and (3) timing relative to major events. The researchers discovered that enumerators had shortened or adapted the original questions. While unfortunate, it is hoped that these changes may can inform future updates and approaches to improve the questions.

Points of discussion:

The research in Nepal, funded by the Bill and Melinda Gates Foundation and IMPROVE,ⁱⁱⁱ had intended to observe iron receipt while asking women to confirm what they had received. Before the project was stalled, an assessment of social desirability bias, funded by DataDENT, had also been planned to examine the women's responses. The International Food Policy Research Institute (IFPRI) had also been undertaking some related cognitive testing in India but validation was interrupted by the pandemic. Cognitive interviews are useful for determining whether women understand the interview questions. Determining how respondents arrive at their answers is more challenging, however, because they often find it difficult to explain their thought process.

The adaptations made to the research questions made by enumerators were only discovered after interviewing about 30 enumerators (who had in turn interviewed about 2,000 women). It was not possible to link the interviews with enumerators to the specific interviews they had conducted with women. Most of the adaptations they made were to use the DHS question as written, adding additional probes. For example, most of the women interviewed said they were better able to track events, rather than trimesters, so questions were often adapted with these probes.

Session 2: Quality adjusted/effective coverage measurements

Rebecca Heidkamp reviewed the discussions on quality adjusted/effective coverage from previous TEAM meetings, including the presentation by Theresa Diaz of WHO on the differences between crude and effective coverage. Given the many different coverage indicators, a group of experts was assembled to develop standard definitions and methods for reporting on effective coverage and to set a research agenda. This work was addressed as part of the maternal, newborn, child, and adolescent health and nutrition 'Think Tank Series' and was published in the Lancet Global Health in May 2020, including a brief literature review about effective coverage, proposed standard definitions, guidelines for reporting, and examples from maternal, newborn, and child health. The 'coverage cascade' was included, focusing on two measures: quality-adjusted coverage^{iv} and outcome-adjusted coverage.^v Most preventive interventions would be best measured by quality-adjusted coverage.

An update was also provided on joint IMPROVE and DataDENT efforts related to quality-adjusted coverage of nutrition interventions. This builds on work related to two global health facility survey tools: the DHS programme's work to link data from service provision assessment (SPA) surveys with coverage data from DHS, as well as the service assessment and readiness (SARA) survey developed by WHO. The DataDENT and IMPROVE work aims to address the lack of standard definitions for reporting on the quality of nutrition services.

An expert survey was launched in June 2020 to identify quality definitions, essential items for a quality nutrition intervention, and what was missing in the SPA and SARA tools. Items from the questionnaires were rated for quality using a Likert scale. A similar approach was taken for ANC quality summary indices. A manuscript will be available by the end of the year.

The group was asked to consider the relevance of this work for TEAM, and whether TEAM should be involved in the review of the core SPA questionnaire. There had previously been discussion about TEAM being involved in developing cascades for other nutrition interventions. Now that formal definitions have been established, TEAM may wish to become more involved in developing coverage measures for nutrition interventions.

Points of discussion:

The group discussed the relevance of this work to WHO/UNICEF and TEAM. Several members agreed that TEAM should remain engaged in the work on coverage measurement being done by others, such as Think Tank and Countdown to 2030, rather than taking on new work in this area. A suggestion was also made for TEAM to endorse the new definitions.

The DHS programme is revising the SPA data and indicators. This is a different process than was used for the DHS survey review, described above, and TEAM may wish to review the recommended changes. The quality part of this work has been challenging given that it involves observation. The DHIS2 work may help inform this process, as health management information systems (HMIS) may be more up to date on the situation in clinics than the SPA.

If UNICEF decides to pursue work on quality-adjusted coverage for nutrition interventions, a suggestion was made for TEAM to advise on this work, including by developing a thought piece or guidance on this issue. Through the Health Data Collaborative, a wider effort is also underway to identify core indicators to collect through health facility surveys. This is an opportunity to make a contribution related to nutrition indicators. World Bank has also started developing their own health facility surveys; therefore, it would be good to include them in the wider effort to align survey questions, where relevant. A suggestion was made to engage the University of California, Davis on their work around fortification. This would help provide some additional context on other nutrition interventions for which slight adaptations may be needed to measure quality coverage.

Actions: (1) The TEAM Secretariat will follow up on the state of the Think Tank; 2) UNICEF, with TEAM guidance, will develop a thought piece to accompany and further conceptualize a wider variety of nutrition interventions using the coverage cascade; (3) TEAM will remain engaged in the SPA process, with Sorrel Namaste facilitating follow-up; and (4) TEAM will engage in the health data collaborative initiative around nutrition indicators.

Session 3: Anthropometry data quality research questions

Julia Krasevec provided an update from the data quality research working group. The anthropometry data quality guide was published, and feedback has been positive; however, some unanswered questions remain. A call was organized in November 2019 with external contributors and the group agreed to address six previously identified topics, as well as two additional priorities. It was agreed that research questions for each topic would be developed by different contributors.

The following priority research questions were identified: (1) thresholds and/or ranges for indicators of data quality; (2) WHO flags and whether they are consistent with plausibility; (3) standardization tests; (4) random versus systematic error; (5) re-measurements during survey field work; (6) taking more than one measurement during survey field work; (7) validation of event calendars to estimate age of children without a known date of birth; and (8) hair and clothing and its impact on height/weight measurement. Work was initially planned to prepare background papers on each question that would be reviewed by the working group; however, there is limited capacity to continue this work. Additional resources are needed to continue carrying out the work to summarize priorities, review existing data sets, and in some cases, undertake field work.

Points of discussion:

The working group will need to finish articulating the eight research questions before prioritizing funding for each. At that point, it would be important to seek dedicated resources and/or agreements with universities for research support. This issue was discussed further in the work planning discussion (see session 9).

Given the uncertainty about being able to conduct field work in low- and middle-income countries currently, there was a suggestion to link with the National Health and Nutrition Examination Survey (NHANES) or other survey entities in the United States. It was noted that a representative of NHANES is part of the external working group and could be approached about pursuing some of this work with less funding than may be needed elsewhere.

A point was also made about fluctuation of wasting estimates related to seasonality and other issues that may be useful to explore further if funds were available.

Session 4: Diet quality indicators

Mary Arimond reviewed the work presented during the previous TEAM meeting, including the results of a light landscaping analysis. The working group spoke with experts to identify needs and gaps related to monitoring diets and whether they saw a role for TEAM in this area. Many gaps were identified and there was broad consensus that TEAM could play a convening role in this work.

A draft paper was finalized in the fall of 2019 and published on the TEAM website.² TEAM agreed to convene experts working on indicators of healthy diets, with the long-term goal of identifying a small set of indicators that would be useful to include in global and national monitoring frameworks. The working group also discussed whether it would be useful to engage in a more extensive dialogue through communities of practice.

The working group had discussions with USAID's flagship Advancing Nutrition project regarding co-convening and supporting a workshop on diet quality; these plans were shifted to a virtual format in

² Report available at: <https://www.who.int/publications/i/item/9789240001329>

response to the COVID-19 pandemic. A concept note was further refined with inputs from the working group and is nearly finalized. The working group and Advancing Nutrition will agree on the format for the workshop during its next meeting in June 2020.

Points of discussion:

The working group will confirm after its meeting whether TEAM would be asked to review the concept note. There was a question about whether any plans were underway to update the indicator of minimum dietary diversity for women (MDD-W) in order to harmonize with the new indicators for infants and young children. The Food and Agricultural Organization (FAO) has been involved in methodological research on this issue and is preparing to update the indicator guidance. They are aware that a parallel process is underway for updating the indicators for infants and young children and are in contact with WHO to align the two initiatives.

Session 5: Guidance on nutrition information systems (NIS)

David Hales, a consultant working on the NIS guide, reviewed the guide's background and objectives (see the 8th TEAM meeting report³). The structure of the NIS guide has been changed from its original draft form. The revised approach focuses on a national system, and the guide is divided into two sections: fundamentals and technical notes. The fundamentals section provides a series of basic entry points to core topics, with an aim to engage non-technical users, while the technical notes section addresses specific issues and processes faced by those implementing a NIS.

A list of possible topics is under discussion for the technical notes section. Those with expertise in these areas will be consulted in drafting the note. New notes will be added, and others will be adapted over time as new opportunities and challenges arise.

Points of discussion:

The two sections of the NIS guide may not necessarily be combined in one document, given the different audiences being targeted and the preference for a concise document. UNICEF and WHO regional and country offices would also be consulted for feedback.

Several advisors noted their appreciation for the guide's new format. Purnima Menon offered to review some sections, as IFPRI is currently working with the Government of India and the policy community to consider priority indicators for tracking progress on nutrition in the context of COVID-19 and there are some potential insights to share from that process.

Action: It was agreed that the NIS working group should meet to discuss the revised outline. An outline of each technical note will also be circulated to TEAM for feedback. Those interested in contributing to drafting of technical notes will contact the working group.

Session 6: Revision of IYCF indicators guideline – update and next steps

Laurence Grummer-Strawn reviewed the process undertaken to revise the IYCF indicators manual. The last manual was published in 2008 and included 15 core and optional indicators. The manual was widely used and accepted; however, the indicators were heavily weighted towards breastfeeding and optional indicators were not frequently used.

³ Available at: <https://www.who.int/docs/default-source/nutritionlibrary/team---technical-expert-advisory-group-on-nutrition-monitoring/2019-team-8thmeeting-report.pdf?ua=1>

As part of the revision process, expert consultations took place in 2017⁴ and 2018⁵ (*see previous TEAM meeting reports for details*), as well as extensive reviews, and the draft is near final. In the new manual, there is no distinction between core and optional indicators; the number of indicators increased from 15 to 16; the balance between breastfeeding and complementary feeding indicators has improved; and there are three new indicators on unhealthy eating. Area graphs have also been elevated in importance given their usefulness in programming.

Some key issues were resolved during the previous TEAM meeting. It was agreed that 100% fruit juice would be counted as part of sweet beverage consumption based on epidemiological literature and given the challenge in distinguishing it from fruit flavoured drinks, which may have no actual fruit content. Unhealthy food consumption was also discussed at length and four categories were proposed.^{vi}

The manual has been separated into two components: definitions and measurement. The document is in its final stages and is expected to be published in the third quarter of 2020. Dissemination plans are now being discussed, including using listserv notifications and regional webinars. TEAM was invited to suggest additional opportunities for dissemination.

Points of discussion:

The importance of effectively communicating the new indicators was emphasized. Many members of the working group felt a communications plan was critical, with broader communications materials developed to help users understand and interpret the changes. It was noted that communication around the previous indicators was poor and led to confusion. It was suggested that a small sub-set of the working group discuss the dissemination plan further while others were also encouraged to disseminate the published document with their networks. *See session 9 on TEAM work planning for further actions.*

Session 7a: Overview of current work on haemoglobin assessment

Monica Flores provided an overview of current work on haemoglobin assessment and global estimates of anaemia. She reviewed the history of anaemia thresholds, including key reports and publications. In 2019, the WHO guidelines development group held a meeting on the use and interpretation of haemoglobin concentrations for assessing anaemia status in individuals and populations – the first guideline for anaemia. Additional technical meetings will be held on considerations for adjustments of haemoglobin concentrations (e.g., related to genetic background, for pregnancy, etc.).

The vitamin and mineral nutrition information system (VNMIS) was initiated in 1990 via a World Health Assembly mandate to strengthen surveillance of micronutrient deficiencies at global level. It consists of four components: (1) the micronutrient database; (2) an indicators summary; (3) laboratory capacity; and (4) surveillance tools.

The micronutrient database includes data for more than 20 micronutrients and 40 indicators, indicating deficiency and excess, and is a collaborative effort between United Nations agencies, regional offices, partners and non-governmental organizations. Data are received from partners, organizations and through active search; screened for inclusion; checked for consistency/completeness; extracted and entered into the database; checked by a minimum of two people and verified; and then published.

⁴ Report available at: <https://www.who.int/nutrition/events/2017-team-technicalconsultation-iyfc-indicators-meetingreport.pdf?ua=1>

⁵ Report available at: <https://www.who.int/nutrition/team/2018-team-interagency-consultation-iyfc-indicators-meetingreport.pdf?ua=1>

To date, the global database includes 716 published surveys, including 419 with haemoglobin data, and around 250 surveys are currently being verified. Thus far, 137 Member States have reported data on children under 5 and women. Challenges include a scarcity of data and limited comparability across and within countries and over time. This is due to differences in definitions and cut-offs, methods for assessing haemoglobin levels, instruments used to collect samples, data quality and seasonal factors.

Current anaemia estimates are based on model data taken from 1990 to 2016 from 116 countries. For the projection, a Bayesian model was used to address missing data, non-linear time trends, and the representativeness of data sources. Anaemia prevalence is now an SDG indicator, with reporting set to begin March 2021. However, there are challenges in interpreting trends for this indicator and concerns as to why estimates have not progressed. To address this concern, the 2020 edition of the model will incorporate mechanisms to adjust for the different methods of measuring blood haemoglobin, specimen type, and seasonality, which may affect measurement.

Exploratory analyses are now underway to identify potential new covariates that might enhance trend interpretation, as well as ongoing data validation and discussion with other expert groups. TEAM is invited to contribute to these discussions.

Session 7b: Improving determination of Hb concentration in population surveys

Omar Dary described the USAID initiative to improve the accuracy and precision of measuring haemoglobin concentration using large population surveys. Data collected from DHS and micronutrient surveys MNSs in four countries show wide variations in anaemia prevalence in women of reproductive age and pre-school age children. The differences are related to the use of venous blood samples in micronutrient surveys, whereas the DHS uses capillary blood (by finger-pricking). The micronutrient survey predicts anaemia prevalence between 40-50% lower than the DHS. Both HemoCue 201+ and HemoCue 201 machines were highly reproducible in a range of haemoglobin concentrations, thus the differences are not attributable to the machine.

USAID also examined differences in haemoglobin concentration in blood samples from women in Guatemala, using the two different blood measurements. HemoCue 201+ underestimates haemoglobin concentrations while the HemoCue 301 overestimates them. Further, 'pooled' capillary blood was found to produce slightly higher haemoglobin values than venous blood. A study in Honduras looked at the dispersion of values between venous blood and pooled capillary blood to see if capillary blood could be used in field testing. Regrettably, when pooled samples of capillary blood are extracted by inexperienced personnel, even under clinical settings, haemoglobin results had a much higher variation than those using venous samples, and therefore the prevalence of anaemia would be higher. Even when measurement is done by experienced personnel, drops of capillary blood from two different hands of the same subject can vary in haemoglobin concentration.

USAID is launching a common protocol for haemoglobin concentration, and will compare venous, pooled, and capillary blood within clinic settings in order to select the most reliable combinations and conduct field testing to solve the uncertainties found in large-scale population surveys.

Points of discussion:

There was some discussion about whether the outcome of the studies should lead to developing a better protocol for capillary blood, or rather, to the recommendation that only venous blood be used. Using venous blood would be challenging in population surveys and there would be resistance to making

this change; however, it may be necessary. The studies play an important role in raising awareness about these challenges.

It was recommended that TEAM initiate a process to develop a haemoglobin data quality manual that mirrors the process and outcome used to develop the anthropometry data quality guide. While there are many groups investigating these issues, there is a need for a collaborative process to develop clear guidance on the issue. The Centers for Disease Control and Prevention (CDC) and USAID began discussions on this idea in 2014, but the work was put on hold while developing the anthropometry data quality guide. There was agreed that it should be resumed. *See Session 9 on work planning for actions.*

Session 8a: Updates on DHS-8

Sorrel Namaste provided an overview of the DHS-8 update process, including changes to the anaemia questions. DHS is the most common source of anaemia data currently. The DHS-8 pilot is undertaking an analysis to compare venous, pooled capillary, and single-drop capillary samples to determine which measure is most appropriate. If venous blood is identified as the best solution, the nutrition community will need to consider what other data to collect to complement this information. Testing is underway for all content in the new questionnaire. Specific to nutrition, cognitive testing on the new IYCF and MDD-W questions is underway. If TEAM would like to provide input, those tools can be shared.

Various changes have already been made in the new survey in response to feedback from the anthropometry working group, such as the anthropometry remeasurement standard and a wasting referral system. Work is also underway to determine how to adapt the nutrition questionnaire for each survey. There are 250 questions requiring adaptation in the women's questionnaire, 19 per cent of which are nutrition questions. A DHS-8 nutrition tabulation plan has been drafted and shared with UNICEF and DataDENT for feedback; TEAM is welcome to review and input to this work as well. The DHS programme is also developing an eLearning course and in-person workshop for policy makers and programme managers on how to use nutrition data, including the new IYCF indicators. Mock-ups of the content can be shared with TEAM for feedback before being programmed.

Session 8b: Updates on the Joint Malnutrition Estimates 2020 edition, country level models and wasting trends

Richard Kumapley provided an update on the release of the latest Joint Malnutrition Estimates (JME) in March 2020. Regional and global estimates and country survey estimates have been shared for SDG reporting, as well as a tracking tool for the WHA targets. The JME contains 924 data sources, a significant increase of 70 sources from the previous year. To determine the acceptability of these 70 sources, data quality assessments were undertaken to review the survey report, examine the sampling and methodology, and run a data quality report where possible.

Country-level models were developed for stunting and overweight to fill in data gaps, drawing on feedback from a consultation on the models. The model will use covariates to provide greater predictability, especially for years in which countries have no anthropometric data. The sample standard errors have been revised and are being used as a linear predictor. The group looked at all feedback presented from the consultation. A decision was also taken to change the location of the penultimate spline to make smoother trends for stunting and overweight in recent years. The JME group will aim to close the data set by the end of July and conduct a country consultation. For wasting, the JME group has cautioned against using trends due to limitations in survey estimates; however, a deeper dive is planned to better explore trends and interpretation for wasting.

Points of discussion:

There was a question about whether underweight was included in any of the JME analyses. While this issue was discussed by the JME working group, they determined it would be better to wait until after the wasting model was complete before discussing further. Underweight estimates are available (but not published) and can be shared.

It was noted that IFPRI has a paper from India showing that geographic and time variations in anthropometric measurements can be more problematic for wasting trends than for stunting.⁶ An ecological analysis of 640 districts also shows that high stunting levels are associated with high mortality.

Session 8c: Updates on UNICEF Global Database on IYCF - Technical Advisory Group (TAG)

UNICEF convened the first meeting of the IYCF-TAG in 2019. In June 2020, a second meeting was organized where UNICEF presented its proposal to address the various recommendations received during the first meeting. Vrinda Mehra provided an overview of the work done to address and implement the recommendations made by TAG on maintaining, updating and expanding the UNICEF global database on IYCF. A key discussion point from the last meeting related to the need to consistently document the process undertaken by UNICEF to review the quality of IYCF data points.

TAG members had discussed several options that would allow UNICEF to communicate its confidence in IYCF estimates without having to exclude the data altogether. Options included reporting problem points separately, assigning footnotes or flags, and assigning quality ratings. It was agreed that any approach should leave room for value judgements as needed. With these suggestions in mind, UNICEF has developed a standard template for documenting decisions and concerns about a data point, accounting for the various quality criteria. While the templates are currently maintained internally, different options were discussed for showcasing them more widely.

UNICEF is in the process of developing an IYCF-specific brochure that would be published annually. An outline will be shared with the TAG members for further input.

Session 8d: Update on the compendium of household survey questions

Rebecca Heidkamp provided an overview of the successful campaign to identify nutrition data gaps in that could be addressed in household surveys and mobilize the global community to endorse a set of recommendations to the DHS programme. Nearly all these recommendations were accepted for their round 8 questionnaire.

Some additional recommendations were raised during the consultative process. To avoid losing those insights, DataDENT is developing a compendium of core questions and indicators, which is modelled after the compendium of water, sanitation and hygiene indicators. The audience for the compendium is stakeholders implementing large-scale nutrition surveys (e.g., national SMART surveys). Building on previous work in this area, the compendium will aim to match recommended definitions and incorporate lessons from more recent measurement research and cognitive testing.

⁶ Madan EM, Frongillo EA, Nguyen PH, Menon P, Johnston R, Daniel A, Agarwal P, Dwivedi L, Khera A. Effect of differences in month and location of measurement in estimating prevalence and trend of wasting and stunting in India in 2005-2006 and 2015-2016, Current Developments in Nutrition nzaa092, 2020.

A first draft of the core content is now available, and DataDENT would like to have it reviewed by an external group with the goal of publishing it by the end of 2020. TEAM members interested in reviewing the document are invited to contact Rebecca Heidkamp.

Session 8e: Mid-term review of the Global Nutrition Monitoring Framework (GNMF)

Kuntal Saha noted that 2020 marks the mid-term review of the UN Decade of Action on Nutrition. While the GNMF is not included specifically in this review and TEAM as an expert group has been advising on the development and refining of the GNMF indicators, it might be useful for TEAM to review the GNMF and its extended set of indicators. Earlier TEAM reviewed and identified five indicators in the list of extended GNMF indicators that TEAM may wish to contribute to improving. *See Session 9 on work planning for further discussion and actions.*

Points of discussion:

Some advisors asked to circulate information about the potential role of TEAM in reviewing the usefulness of the GNMF indicators, including whether the indicators are meeting WHA needs and whether this could be part of the mid-term review.

Action: The TEAM Secretariat will provide more information on the purpose and process of a mid-term review that can be followed up and reported back during the next TEAM meeting.

Session 9: Review of TEAM workplan 2020–2021

TEAM came to consensus on next steps for four key issues earlier in the meeting:

- 1) The feasibility of raising resources** to support work on research questions in the anthropometry data quality guide.

First, it was agreed that resources would be needed to produce the background papers on unresolved questions. Second, the background papers would help to determine what further resources would be needed for field testing.

Action: Those assigned to prepare the background papers would be asked to come up with a tentative budget for each question. Next, the working group could reconvene to discuss priorities and timelines for address them and determine whether resources were available in the existing TEAM budget, or in those of other represented organizations.

- 2) A communications plan to raise awareness about the new IYCF indicators**

Action: UNICEF and WHO will develop a strategy for communicating and disseminating information about the new and updated IYCF indicators.

A slide deck has already been prepared for regional offices and Mary Arimond also drafted a brief, which UNICEF will update. TEAM was invited to follow up with the Secretariat with any further suggestions. 'Data for Nutrition' was also suggested as another opportunity for disseminating information about the new indicators. All Data for Nutrition webinars are available via YouTube and are easy to share. In addition, the UNICEF regional offices have disseminated some materials in regional workshops in Eastern and Southern Africa, Western and Central Africa and East Asia and Pacific. A generic communications brief on definitions and implications for policy makers will be useful for rolling out the updated IYCF monitoring and evaluation guide.

The International Congress of Nutrition meeting may also be an opportunity to disseminate information about the new indicators. Lynette Neufeld and Edward Frongillo may be able to facilitate this process.

An area graphs guide will be published later in 2020, as well as a paper comparing the old and new indicator definitions and recalculating them to allow for comparison.

3) Developing a haemoglobin data quality manual

Action: TEAM could initiate a process to develop a manual, drawing from the existing Haem group. The group already has some work underway and could include developing the manual in its next steps. It would be helpful to have TEAM's endorsement of this work and to potentially establish a small group of TEAM members to follow up this issue (some members are already involved). The DHS programme would support this idea: the anthropometry data quality guide has substantially changed the way they collect data, and such a tool is likely to be equally valuable for anaemia. It was noted that CDC will continue working on micronutrient biomarkers to support TEAM and WHO. A suggestion was made to select another two members from TEAM to reconvene before asking another group.

4) Extent of TEAM engagement in COVID-19 response

There was some discussion about whether TEAM should issue recommendations on nutrition questions to include in monitoring of the COVID-19 pandemic. Ideas for potential TEAM contributions included: 1) a commentary on which data are important for monitoring nutrition and COVID-19 (coverage, IYCF, wasting) and/or drawing from country experiences and innovations in doing this work (e.g., China and India) published in a journal; 2) guidance for countries on how to develop their own case studies or modelling; 3) collate and capture lessons learned in the field; 4) publish a blog post or statement (on the TEAM or DataDENT website) emphasizing the need for attention on nutrition data during the pandemic.

More than 100 countries are involved in the global framework response plan led by the United Nations Office for the Coordination of Humanitarian Affairs, with more than 100 countries implementing and different agencies are leading on nutrition, food security, health and other areas. The Global Nutrition Cluster (GNC) is leading on nutrition and has received many requests for COVID-related nutrition indicators. More than 80 countries are reporting every two weeks on a set of nutrition-related indicators, with many decisions in countries being made based on these data. Within the GNC, the Global Technical Assistance Mechanism is addressing related technical issues to support countries. It is important for TEAM to harmonize its recommendations to countries with those being provided by the GNC; Louise Mwangi can connect TEAM with some of the issues requiring guidance and technical support in countries.

Actions: A sub-group will be formed to determine a way forward on the ideas listed above for TEAM's engagement in COVID-19 data response. It was agreed that this group should coordinate and harmonize its efforts with the work of the GNC.

Those interested in joining this sub-group include: Jennifer Coates, Edward Frongillo, Purnima Menon, Rebecca Heidkamp, and Sara Wuehler.

Next steps:

There was some discussion about how TEAM could reach consensus on other priority areas for its new work plan. Many TEAM members found the virtual meeting efficient and would support having virtual meetings as a regular part of TEAM's modalities. Different scenarios were proposed, such as having one in-person meeting and two virtual meetings a year.

Action: The Secretariat will prepare a draft list of priorities (based on those identified in previous TEAM meetings) and circulate it for feedback and voting.

Action: The Secretariat will consider how to implement these new modalities for future meetings.

Annex I: Meeting agenda

9th Meeting of the WHO-UNICEF Technical Expert Advisory group on nutrition Monitoring (TEAM)

Date: 15 June 2020

Time: 14-18h CET; 8-12h (EDT)

Venue: Virtual meeting using Zoom (a meeting invite was sent on 20 May 2020)

Background:

This virtual meeting has been organized as an alternative to the planned 9th meeting of the TEAM. As the face-to-face June TEAM meeting has been postponed due to the current COVID-19 pandemic, the TEAM Secretariat, in consultation with the TEAM Co-chairs, decided to hold a virtual meeting of the TEAM on the 15th of June 2020 in order to maintain momentum around TEAM activities.

Objectives:

- To review progress of the ongoing TEAM workplan activities and decide next steps.
- To discuss and develop a TEAM workplan for 2020-2021.

Process:

All TEAM working groups will update on the progress of their ongoing activities and propose next steps with timelines. The proposed next steps will be adjusted based on the ensuing technical discussion in the meeting sessions. The TEAM workplan will be updated based on the meeting outputs and circulated among the relevant parties.

As this meeting will be of four hours instead of the usual 2-days, the TEAM working groups are encouraged to meet over conference calls between now and the meeting to discuss progress, prepare updates and propose timelines. The TEAM Secretariat will facilitate the organization of these calls in consultation with the working group leads.

A meeting report will be prepared from the notes taken during the meeting.

Session structure:

- The meeting will be conducted virtually for four hours following a format different from the previous TEAM meetings;
- Most sessions will be basically brief updates from the working groups;
- There will be a few sessions of 20 minutes – 10 minutes each for presentation and discussion;
- **All working group leads will share their PowerPoint slides and/or background documents with all TEAM members and TEAM Secretariat by 10 June;**
- To avoid any technical glitch and smooth running of the meeting, all sessions will be facilitated by the TEAM Co-chairs unless otherwise indicated.

Meeting agenda

When EDT/CET	What	Who
8:00-8:10/ 14:00 – 14:10	- Welcome and introductions - Opening remarks by TEAM Co-chairs	Chika Hayashi/Kuntal Saha Jennifer Coates/Edward Frongillo
8:10-8:25/ 14:10 – 14:25	New challenges for food and nutrition surveillance and the role of TEAM; UNICEF Update and COVID	Francesco Branca/Chika Hayashi
8:25-8:45/ 14:25 – 14:45	Session 1: Antenatal iron supplementation indicator – updates and next steps	Sara Wuehler
8:45-9:05/ 14:45 – 15:05	Session 2: Quality adjusted/effective coverage measurements	Rebecca Heidkamp
9:05-9:25/ 15:05 – 15:25	Session 3: Anthropometry data quality research questions – updates and next steps	Elisa Dominguez/Julia Krasevec
9:25-9:35/ 15:25 – 15:35	Session 4: Diet quality indicators	Mary Arimond
9:35-9:45/ 15:35 – 15:45	Session 5: Guidance for nutrition information system	David Hales
9:45-9:55/ 15:45 – 15:55	Session 6: IYCF Indicators document	Laurence Grummer-Strawn
9:55-10:10/ 15:55 – 16:10	Break: Bring your own tea or coffee	
10:10-10:30/ 16:10 – 16:30	Session 7: - Overview of current work on haemoglobin assessment and global estimates of anaemia - Improving the reliability of hemoglobin determination in population surveys	Monica Flores/Lisa Rogers Omar Dary
10:30-10:55/ 16:30 – 16:55 (5 minutes per topic)	Session 8: Updates on – - Updates on the DHS-8 - Joint malnutrition estimates (JME) - IYCF indicators TAG - Update on the compendium of HH survey questions - Mid-term review of the GNMF	Sorrel Namaste Richard Kumapley/Elaine Borghi Vrinda Mehra Rebecca Heidkamp Kuntal Saha
10:55-11:55/ 16:55 – 17:55	Session 9: Review of TEAM workplan 2020-2021	Jennifer Coates Edward Frongillo
11:55-12:00/ 17:55 – 18:00	Closing remarks:	TEAM Co-chairs/Secretariat

Annex II: List of participants

Members

1. Jennifer Coates – Co-chair
2. Edward Frongillo – Co-chair
3. Mary Arimond – Member
4. Omar Dary – Member
5. Rafael Flores-Ayala – Member
6. Rebecca Heidkamp – Member
7. Purnima Menon – Member
8. Sorrel Namaste – Member
9. Lynnette Neufeld – Member
10. Sara Wuehler – Member
11. Wenhua Zhao – Member

Observer

1. David Hales – Independent consultant

TEAM Secretariat (UNICEF)

1. Chika Hayashi
2. Julia Krasevec
3. Richard Kumapley
4. Vrinda Mehra
5. Louise Mwirigi

TEAM Secretariat (WHO)

1. Elaine Borghi
2. Francesco Branca
3. Elisa Dominguez
4. Monica Flores
5. Lawrence Grummer-Strawn
6. Kuntal Kumar Saha

Rapporteur

1. Julia D'Aloisio – Independent consultant

ⁱ See https://www.who.int/maternal_child_adolescent/stage/en/

ⁱⁱ Development and validating an iron and folic acid supplementation indicator for tracking progress towards Global Nutrition Monitoring Framework targets, 2018; and Improving antenatal iron-containing supplementation indicators, 2019.

ⁱⁱⁱ The Improving Measurement and Programme Design project

^{iv} Quality-adjusted coverage: Population in need who comes into contact with a service that is 'ready' and receives the service according to quality of care standards (i.e., what is expected to be delivered to maximize health gain).

^v Outcome-adjusted coverage: Population in need who receives the service according to quality of care standards, adheres to provider instructions, and experiences the expected health gain.

^{vi} (1) Candies, chocolate and other sugar confections; (2) Frozen treats like ice cream, gelato, sherbet, sorbet, popsicles; (3) Cakes, pastries, sweet biscuits and other baked confections; (4) Chips, crisps, cheese puffs, French fries, fried dough, instant noodles, and similar items.