Goal 4

**Target number:** 4.2

**Indicator Number and Name:** 4.2.1 Proportion of children under 5 years of age who are developmentally on track in health, learning and psychosocial well-being, by sex

**Agency:** UNICEF

**Has work for the development of this indicator begun?** Yes

**Who are the entities, including national and international experts, directly involved and consulted in developing the methodology and/or data collection tools?**

Since 2015, UNICEF has been undertaking methodological work towards the development of an improved measure of ECD outcomes, building on an existing tool – the Early Childhood Development Index (ECDI) – within the context of SDG monitoring and reporting, in collaboration with an expert advisory panel consisting of academic experts and researchers in the field of early childhood development measurement and tool development, and technical experts in validity and reliability testing and cognitive testing for tool/instrument validation.

**What is the involvement of or how do you plan to involve National Statistical Systems in the development of the methodology?**

UNICEF has established a global inter-agency advisory and coordination group on ECD measurement (IAEG-ECD) whose overarching purpose is to oversee the revision, testing and validation of the new ECD measure for use by all countries to collect internationally comparable, nationally representative and statistically sound data to monitor and track progress towards achieving target 4.2. Membership is open to National Statistical Offices, other UN agencies and relevant INGOs, and is being advised by an Expert Advisory Panel consisting of academic experts in the field of early childhood development measurement and tool development, and technical experts in validity and reliability testing and cognitive testing for tool/instrument validation. The role of the Expert Advisory Panel is to support the development of the improved measure by providing technical advice, input to, and review of, the methods and draft tools as they are developed.

Currently, UNICEF is the chair of the IAEG-ECD and membership includes representation from the following partners: UNESCO, World Bank, OECD, WHO, IADB, Save the Children, the Palestinian Central Bureau of Statistics and the Instituto Nacional de Salud Pública (INSP) México.

As was the case with the current ECDI, it is anticipated that National Statistical Offices (NSOs) will also be involved in the actual data collection once the measure is finalized through their implementation of household surveys including Demographic and Health Surveys (DHS) and Multiple Indicator Cluster Surveys (MICS).

**Please briefly describe the process of developing the methodology for the indicator**
The methodological plan includes several steps: (1) review and mapping existing measures and items on ECD derived from both caregiver report and direct assessment; (2) technical consultations with experts in the field of ECD measurement and tool development; (3) cognitive testing of a bank of items across a variety of country contexts to gain understanding on how items are performing in terms of respondent interpretation and comprehension; (4) development of a series of background papers on the available literature and evidence pertaining to young children’s development in health, learning and psychosocial well-being as well as a paper on recommended methodological and psychometric approaches to constructing a strong tool/instrument for measurement purposes; (5) dedicated testing, validation and piloting of the improved ECD measure in selected countries (6) development of a manual for field implementation; (7) dissemination and capacity-building for countries to implement and use the new ECD measure.

Please indicate new international standards that will need to be proposed and approved by an intergovernmental process (such as UNSC) for this methodology.

Internationally agreed standards for early childhood development outcomes currently do not exist. The improved ECDI measures selected developmental milestones that are relevant across contexts and is being tested and validated cross-nationally to ensure the results are reliable and valid across countries.

When do you expect the methodological work on this indicator to be completed?

The methodological work is expected to be completed by the end of 2018. The intention is to present the final measure and results of testing and validation at the next Statistical Commission in March 2019.

Are data and metadata already being collected from the National Statistical System for one or more components of this indicator?

Yes.

If yes, please describe:

As mentioned earlier, MICS surveys have been conducted at regular intervals by several NSOs, and data on ECD have been collected through implementation of MICS in more than 60 (mostly low- and middle-income) countries.

When do you expect work to begin on developing a methodology and with which partners will your organisation work?

UNICEF began methodological work to develop an improved measure for indicator 4.2.1 in 2015. To date, UNICEF has completed a scoping exercise and review of more than 500 items that assess ECD through both caregiver/teacher reports as well as direct assessments included in 10 existing tools/instruments; hosted a series of technical consultations in 2015, 2016 and early 2018 to bring together academics, technical experts and partners in the field of ECD measurement and tool development in support of, and to contribute to, the methodological work; undertaken cognitive
testing of a bank of items in six countries (India, Jamaica, the US, Mexico, Bulgaria and Uganda); commissioned a series of background papers on young children’s development in the health, learning and psychosocial well-being domains as well as on methodological and psychometric approaches to constructing a strong tool/instrument for measurement purposes; and established the IAEG-ECD.

In January 2018, UNICEF convened a technical meeting with members of the IAEG-ECD and the Expert Advisory Panel to review results from the cognitive testing and implications for modifying or revising existing items to determine a revised bank of items for field testing; discuss psychometric considerations for developing the measure; develop a clear plan and timeline for next steps for further testing and validation; and explore opportunities for creating synergies and collaborations to connect various initiatives and streams of work on ECD measurement and monitoring for SDG target 4.2.

Between August 2018 and February 2019, UNICEF will collaborate with national partners to undertake testing, validation and piloting of the ECD measure in a selection of countries. The primary goal of this testing is to assess the performance of the measure and to inform further refinement of the set of items, with a secondary goal of comparing/validating its results in relation to measures of early childhood development collected by direct assessment. The field test will also collect a large body of information on the general characteristics of households and their members such as age, education, housing conditions, water and sanitation, and financial standing; key sociodemographic characteristics of mothers; aspects of the household learning environment such as the presence of books and playthings, adult support for learning in the home and attendance to early childhood education; and other selected measures of child well-being including child functioning, exposure to non-violent and violent disciplinary methods at home and anthropometry.

By the end of the process, the final output will be a standardized and validated tool to measure ECD outcomes, along with guidance on its implementation, that can be broadly used by countries in national household surveys for monitoring of SDG target 4.2.

**How do you plan to collect the data?**

The improved measure of ECD outcomes will be available for inclusion in national household surveys, including in the context of the UNICEF-supported MICS, which are household surveys designed and implemented by national counterparts (mainly NSOs) with technical support from UNICEF. Some countries may also decide to include the new module in other household surveys such as the DHS supported by USAID, as well as national surveys that are not part of these global household survey programmes.

UNICEF will compile the data through its well-established system of data gathering, compilation and quality assurance, which has been in existence for two decades. These data will then be used for global monitoring and reporting on SDG indicator 4.2.1.

**With what frequency is data expected to be collected?**

Every two to four years, depending on the needs and interests of the country.
Expected data coverage of the indicator including total number of countries for which there will be information and the regions in which these countries exist.

Data collected using the current ECDI through the implementation of household surveys like MICS and DHS are currently available for nearly 70 mostly low- and middle-income countries. The intention is to embed the improved measure within the standard questionnaires for MICS and therefore, it is anticipated that data will be collected in a large number of countries spanning practically all regions of the world. There will also be concerted efforts to advocate for the inclusion of the improved measure in other national data collection efforts.

Is there a process of data validation by countries in place or planned for this indicator?

It is anticipated that all data collected with the improved ECD measure will be owned and validated by the national implementing agency (mainly NSOs). UNICEF will continue to publish only those data that have been vetted by its country offices, in collaboration with national counterparts.

If you have any additional comments that you believe would be helpful to IAEG-SDG members in analysing the work plan and methodological development of the indicator, please provide them here:

No additional comments.

Expected timeline of activities:

August 2018 to February 2019: Dedicated testing, validation and piloting of the improved ECD measure in selected countries and psychometric analyses of the results
March 2019: Presentation to the UNSC of the improved measure and its results
IAEG-SDG meeting in early 2019: Indicator to be submitted to the IAEG-SDG for possible tier reclassification
Data collection will begin: Starting from mid-2019

(as of July/August 2018)