GUIDANCE NOTE: INTEGRATION OF THE EARLY CHILDHOOD DEVELOPMENT INDEX 2030 IN DEMOGRAPHIC AND HEALTH SURVEYS

The purpose of this guidance note is to provide general background on UNICEF’s Early Childhood Development Index 2030 (ECDI2030) and key considerations for its integration into Demographic and Health Surveys (DHS).

HISTORY, DEVELOPMENT AND VALIDATION OF THE ECDI2030

In 2015, a target relating to early childhood development (ECD) was included in the global Sustainable Development Goals (SDGs). Target 4.2 (under Goal 4, on quality education) seeks to ensure that, by the year 2030, all children will have equitable access to quality early childhood development and early learning opportunities. SDG indicator 4.2.1 was chosen specifically to monitor the impact of government action towards this target. UNICEF was appointed as custodian agency for the indicator and mandated to lead the development of a measure to track progress.

That same year, UNICEF initiated rigorous methodological work that involved extensive consultations with experts, partner agencies and national statistical authorities. Over the following five years, a sequence of carefully planned technical activities were executed, incorporating both qualitative and quantitative methods to identify the best items to measure indicator 4.2.1. The work was overseen by the Inter-Agency and Expert Group on ECD Measurement and was advised by a technical advisory group composed of distinguished researchers as well as practitioners with expertise in assessing children’s development across the world. This process led to the development of the ECDI2030.¹

The ECDI2030 addresses the need for nationally representative and internationally comparable data on early childhood development, collected in a standardized way. The module provides a conceptually valid, culturally adequate and robust measure of early childhood development among children aged 24 to 59 months, and is intended to be integrated into household surveys based on probabilistic representative samples.² It is accompanied by a set of standard tools and guidance and a framework for technical assistance to support its implementation.

CONSIDERATIONS FOR INCLUSION IN DHS

The ECDI2030 is well-suited for inclusion in DHS and adds only minimal burden. The ECDI2030 takes only 3-5 minutes to administer to the respondent, under normal survey conditions. Additional costs required for inclusion of the ECDI2030 in a DHS include translation (if necessary) and costs associated with additional time to train fieldwork teams and administer the module during fieldwork.

² The ECDI2030 replaces a previous measure of ECD outcomes (the ECDI) that had been developed by UNICEF for inclusion in Multiple Indicator Cluster Surveys (MICS).
QUESTIONNAIRE DESIGN

THE TOOL

The module contains 20 questions about the way children behave in certain everyday situations, and the skills and knowledge they have acquired. It covers development across three domains: health, learning and psychosocial well-being. The questions are meant to be addressed to the child’s mother or primary caregiver in cases where the mother is not alive or is not living in the household.

PLACEMENT OF THE MODULE IN DHS QUESTIONNAIRES

Because the DHS survey architecture does not include child-level questionnaires, it is recommended to include the ECDI2030 module as part of the Women’s Questionnaire. In this case, the biological mother of the child will be the respondent. The implications of this are that the data collected will not be representative of all children aged 24 to 59 months, but only those living with their biological mother.

SELECTION OF SUBJECT CHILD

A check will need to be added at the start of the module to verify if the woman has any children aged 24 to 59 months (i.e., 2 to 4 years) living with her. If she does, then there are two possible options: 1) ask the questions about all of the woman’s children within this age range, or 2) ask the questions to one randomly selected child within this age range. It is important to flag that the second option will reduce respondent burden but will also result in a smaller number of observations, which could affect the ability to disaggregate results.

Occasionally, in some previous applications of the old ECDI within DHS (and even in some recent surveys that have adopted the ECDI2030), a filter was added to select only the youngest (or oldest) child aged 2 to 4 years living with his/her mother as the subject child for administering the module. This practice should be avoided since it can lead to overrepresentation of younger (or older) children in the final sample, which has implications for the resulting estimates.

CUSTOMIZATION AND TRANSLATION

No questions should be added or removed from the ECDI2030 module, nor should there be any changes introduced to question phrasing, question order or response options since this could affect the integrity and quality of the data collected. That said, some questions in the ECDI2030 can be customized to the context in which they will be used; standard customization guidance is available on the ECDI2030 resource page. Customization of the ECDI2030 should be completed prior to conducting any pre-test/pilot, and careful attention should be given to any changes resulting from the customization process.

Standard translations of the ECDI2030 are available in Arabic, Chinese, French, Portuguese (standard and Brazilian), Russian and Spanish on the ECDI2030 resource page. Should there be a need to translate the tool into other languages, best practices for translation should be observed, including translation, back translation, and thorough discussion of discrepancies with a technical team of ECD and survey design experts, in close consultation with the implementation agency and local stakeholders. Further guidance and considerations for translation are available on the ECDI2030 resource page.

TRAINING CONSIDERATIONS

Training fieldwork teams on administration of the ECDI2030 as part of a DHS can be completed in around two to three hours; this includes time for question review and practice or mock interviews. The training does not

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necessarily need to be facilitated by a subject matter expert, although having such an informed expert deliver the training, when possible, is always advantageous. As part of its framework of technical assistance for implementation, UNICEF offers the possibility of facilitating and delivering a remote training on administration of the ECDI2030 (at no cost) as part of the larger fieldwork training for the survey.³

Training can be based on the ECDI2030 module and the accompanying instructions for interviewers available on the ECDI2030 resource page. As part of its package of implementation tools, UNICEF has developed a standard training slide deck that is available upon request.

A sample training agenda and recommended content are as follows:

<table>
<thead>
<tr>
<th>Duration</th>
<th>Contents</th>
<th>Resources</th>
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<tbody>
<tr>
<td>15 minutes</td>
<td>Introduction</td>
<td>Video ECDI2030</td>
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<td></td>
<td>Early childhood development and SDG 4.2.1</td>
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<td>Development of the ECDI2030</td>
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<td>30 minutes</td>
<td>The ECDI2030</td>
<td>ECDI2030: Instructions for interviewers</td>
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<td>Eligible respondents</td>
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<td>Type of questions</td>
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<td>General administration rules</td>
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<td>Interviewing techniques</td>
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<td>Ethical considerations</td>
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<tr>
<td>60 minutes</td>
<td>Question-by-question review</td>
<td>ECDI2030: Instructions for interviewers</td>
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<tr>
<td>60 minutes</td>
<td>Practice</td>
<td>ECDI2030: Instructions for interviewers</td>
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<td>Mock interviews</td>
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Some of the contents/topics suggested above could be removed if they will be covered elsewhere as part of the larger fieldwork training for the survey (such as training on interviewing techniques and ethical considerations).

**INSTRUCTIONS FOR FIELD TEAMS**

A detailed manual with instructions for interviewers is available on the ECDI2030 resource page in multiple languages. If the questionnaire has been customized in any way, there will be a need to also customize the manual for interviewers for consistency.

**DATA PROCESSING**

If the survey is being implemented using computer-assisted personal interviews (CAPI), then the ECDI2030 will need to be programmed as part of the survey’s data collection application and should be tested as part of the dedicated CAPI test.

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³ To request UNICEF training on the administration of the ECDI2030 or to obtain access to the standard training slide deck, please contact Claudia Cappa (ccappa@unicef.org).
Sample weights reflecting selection probabilities and non-response are required to generate the ECDI2030 indicator. The tabulation syntax file (in R, Stata and SPSS) as well as the associated standard tabulation plan (in multiple languages) is available on the ECDI2030 resource page.

ANALYSIS AND REPORTING

The ECDI2030 generates data that are used to calculate a single indicator expressed as the percentage of children aged 24 to 59 months who are developmentally on track in health, learning and psychosocial well-being. The data collected with the ECDI2030 are not intended for reporting on individual domains of development. The final indicator represents a summary score that captures the developmental interlinkages among health, learning and psychosocial well-being.

The numerator of the indicator is the number of children aged 24 to 59 months who have achieved the minimum number of milestones expected for their age group, defined as follows:

- **Children aged 24 to 29 months** – at least 7 milestones
- **Children aged 30 to 35 months** – at least 9 milestones
- **Children aged 36 to 41 months** – at least 11 milestones
- **Children aged 42 to 47 months** – at least 13 milestones
- **Children aged 48 to 59 months** – at least 15 milestones

UNICEF has also developed a standard report template available on the ECDI2030 resource page that can be used as a sample to draft a narrative on the results for inclusion in DHS survey reports.

GLOBAL MONITORING AND REPORTING ON SDG 4.2.1

The data collected with the ECDI2030 can be used by countries for official global monitoring and reporting on SDG indicator 4.2.1:

4.2 By 2030, ensure that all girls and boys have access to quality early childhood development, care and pre-primary education so that they are ready for primary education

4.2.1 Proportion of children aged 24–59 months who are developmentally on track in health, learning and psychosocial well-being, by sex

One important advantage of integrating the ECDI2030 into multi-topic household surveys such as DHS means that the resulting data can be disaggregated by key demographics and subnational areas. Such disaggregation can reveal disparities in developmental outcomes among children, thus helping to advance the SDG commitment to leave no one behind.

The metadata for SDG indicator 4.2.1 are available here:
https://unstats.un.org/sdgs/metadata/?Text=&Goal=4&Target=4.2

RESOURCES

The ECDI2030 questionnaire and all of the accompanying implementation tools and guidance can be found on the dedicated ECDI2030 resource page. Additional supporting dissemination materials available on the site include a promotional advocacy video about the ECDI2030, a frequently asked questions document and links to published academic journal articles documenting the methodological work.