

# SDG indicator metadata

(Harmonized metadata template - format version 1.0)

## 0. Indicator information

### 0.a. Goal

Goal 4: Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all

### 0.b. Target

Target 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

### 0.c. Indicator

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

### 0.d. Series

### 0.e. Metadata update

March 2021

### 0.f. Related indicators

Indicator 4.2.2: Participation rate in organized learning (one year before the official primary entry age), by sex

### 0.g. International organisations(s) responsible for global monitoring

United Nations Children's Fund (UNICEF)

## 1. Data reporter

### 1.a. Organisation

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United Nations Children's Fund (UNICEF)

## 2. Definition, concepts, and classifications

### 2.a. Definition and concepts

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Definition:

The proportion of children aged 24 to 59 months who are developmentally on track in health, learning and psychosocial well-being.

**Concepts:**

The domains included in the indicator for SDG indicator 4.2.1 include the following concepts:

- **Health:** gross motor development, fine motor development and self-care
- **Learning:** expressive language, literacy, numeracy, pre-writing, and executive functioning

- **Psychosocial well-being:** emotional skills, social skills, internalizing behavior, and externalizing behavior

The recommended measure for SDG 4.2.1 is the Early Childhood Development Index 2030 (ECDI2030) which is a 20-item instrument to measure developmental outcomes among children aged 24 to 59 months in population-based surveys. The indicator derived from the ECDI2030 is the proportion of children aged 24 to 59 months who have achieved the minimum number of milestones expected for their age group, defined as follows:

- Children age 24 to 29 months are classified as developmentally on-track if they have achieved at least 7 milestones;
- Children age 30 to 35 months are classified as developmentally on-track if they have achieved at least 9 milestones;
- Children age 36 to 41 months are classified as developmentally on-track if they have achieved at least 11 milestones;
- Children age 42 to 47 months are classified as developmentally on-track if they have achieved at least 13 milestones;
- Children age 48 to 59 months are classified as developmentally on-track if they have achieved at least 15 milestones.

## 2.b. Unit of measure

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Proportion

## 2.c. Classifications

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# 3. Data source type and data collection method

## 3.a. Data sources

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In 2015, UNICEF initiated a process of methodological development that involved extensive consultations with experts, partner agencies and national statistical authorities. Over the following five years, a sequence of carefully planned technical steps were executed, incorporating both qualitative and quantitative methods to identify the best items to measure indicator 4.2.1. This process led to the development of the ECDI2030.

The ECDI2030 addresses the need for nationally representative and internationally comparable data on early childhood development, collected in a standardized way. It captures the achievement of key developmental milestones by children between the ages of 24 and 59 months. Mothers or primary caregivers are asked 20 questions about the way their children behave in certain everyday situations, and the skills and knowledge they have acquired.

The ECDI2030 can be integrated into existing national data collection efforts, including international household survey programmes such as UNICEF-supported MICS and the Demographic and Health Surveys.

The ECDI2030 is meant to replace the Early Childhood Development Index (or ECDI) which collects data on the proxy indicator for SDG 4.2.1 that has been in use since 2015. The former ECDI and the new ECDI2030 target different age groups and measure slightly different development domains. Therefore, the indicators generated by both instruments may not be fully comparable and caution is needed when interpreting estimates produced by the two measures.

### 3.b. Data collection method

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UNICEF undertakes a wide consultative process of compiling and assessing data from national sources for the purposes of updating its global databases on the situation of children. Up until 2017, the mechanism UNICEF used to collaborate with national authorities on ensuring data quality and international comparability on key indicators of relevance to children was known as Country Data Reporting on the Indicators for the Goals (CRING).

As of 2018, UNICEF launched a new country consultation process with national authorities on selected child-related global SDG indicators it is custodian or co-custodian to meet emerging standards and guidelines on data flows for global reporting of SDG indicators, which place strong emphasis on technical rigour, country ownership and use of official data and statistics. The consultation process solicited feedback directly from National Statistical Offices, as well as other government agencies responsible for official statistics, on the compilation of the indicators, including the data sources used, and the application of internationally agreed definitions, classification and methodologies to the data from that source. Once reviewed, feedback is made available to countries on whether or not specific data points are accepted, and if not, the reasons why.

### 3.c. Data collection calendar

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UNICEF will undertake an annual country consultation likely between December and January every year to allow for review and processing of the feedback received in order to meet global SDG reporting deadlines.

### 3.d. Data release calendar

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Updated data on 4.2.1 as measured by the ECDI2030 will be available in the SDG reporting period every February/March.

### 3.e. Data providers

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National Statistical Offices (in most cases)

### 3.f. Data compilers

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UNICEF

### 3.g. Institutional mandate

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UNICEF is responsible for global monitoring and reporting on the wellbeing of children. It provides technical and financial assistance to Member States to support their efforts to collect quality data on early childhood development (ECD), including through the UNICEF-supported MICS household survey programme. UNICEF also compiles ECD statistics with the goal of making internationally comparable datasets publicly available, and it analyses ECD statistics which are included in relevant data-driven publications, including in its flagship publication, *The State of the World's Children*.

## 4. Other methodological considerations

### 4.a. Rationale

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Early childhood development (ECD) sets the stage for life-long thriving. Investing in ECD is one of the most critical and cost-effective investments a country can make to improve adult health, education and productivity in order to build human capital and promote sustainable development. ECD is equity from the start and provides a good indication of national development. Efforts to improve ECD can bring about human, social and economic improvements for both individuals and societies.

### 4.b. Comment and limitations

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SDG 4.2.1 was initially classified as Tier 3 and was upgraded to Tier 2 in 2019; additionally, changes to the indicator were made during the 2020 comprehensive review. In light of this and given that the ECDI2030 was officially released in March 2020, it will take some time for country uptake and implementation of the new measure and for data to become available from a sufficiently large enough number of countries. Therefore, in the meantime, a proxy indicator (children aged 36-59 months who are developmentally on-track in at least three of the following four domains: literacy-numeracy, physical, social-emotional and learning) will be used to report on 4.2.1, when relevant. This proxy indicator has been used for global SDG reporting since 2015 but is not fully aligned with the definition and age group covered by the SDG indicator formulation. When the proxy indicator is used for SDG reporting on 4.2.1 for a country, it will be footnoted as such in the global SDG database.

### 4.c. Method of computation

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The number of children aged 24 to 59 months who are developmentally on track in health, learning and psychosocial well-being divided by the total number of children aged 24 to 59 months in the population multiplied by 100.

### 4.d. Validation

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A wide consultative process is undertaken to compile, assess and validate data from national sources. The consultation process solicited feedback directly from National Statistical Offices, as well as other government agencies responsible for official statistics, on the compilation of the indicators, including the data sources used, and the application of internationally agreed definitions, classification and methodologies to the data from that source. The results of this country consultation are reviewed by UNICEF as the custodian agency. Once reviewed, feedback is made available to countries on whether or not specific data points are accepted, and if not, the reasons why.

## 4.e. Adjustments

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### 4.f. Treatment of missing values (i) at country level and (ii) at regional level

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- At country level

When data for a country are entirely missing, UNICEF does not publish any country-level estimate

- At regional and global levels

The regional average is applied to those countries within the region with missing values for the purposes of calculating regional aggregates only but are not published as country-level estimates. Regional aggregates are only published when at least 50 per cent of the regional population for the relevant age group are covered by the available data.

### 4.g. Regional aggregations

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The global aggregate is a weighted average of all countries with available data. Global aggregates are published regardless of population coverage, but the number of countries and the proportion of the relevant population group represented by the available data are clearly indicated.

Regional aggregates are weighted averages of all the countries within the region.

### 4.h. Methods and guidance available to countries for the compilation of the data at the national level

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Countries gather prevalence data on children's developmental status through household surveys such as UNICEF-supported MICS or Demographic and Health Surveys.

### 4.i. Quality management

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The process behind the production of reliable statistics on ECD is well established within UNICEF. The quality and process leading to the production of the SDG indicator 4.2.1 is ensured by working closely with the statistical offices and other relevant stakeholders through a consultative process.

### 4.j Quality assurance

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UNICEF maintains the global database on ECD that is used for SDG and other official reporting. Before the inclusion of any data point in the database, it is reviewed by technical focal points at UNICEF headquarters to check for consistency and overall data quality. This review is based on a set of objective criteria to ensure that only the most recent and reliable information are included in the databases. These criteria include the following: data sources must include proper documentation; data values must be representative at the national population level; data are collected using an appropriate methodology (e.g., sampling); data values are based on a sufficiently large sample; data conform to the standard

indicator definition including age group and concepts, to the extent possible; data are plausible based on trends and consistency with previously published/reported estimates for the indicator.

As of 2018, UNICEF undertakes an annual consultation with government authorities on 10 of the child-related SDG indicators in its role of sole or joint custodian, and in line with its global monitoring mandate and normative commitments to advancing the 2030 Agenda for children. This includes indicator 4.2.1. More details on the process for the country consultation are outlined below.

#### 4.k Quality assessment

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Data consistency and quality checks are regularly conducted for validation of the data before dissemination

### 5. Data availability and disaggregation

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Data availability:

Data on the indicator collected through implementation of the ECDI2030 are expected to become available beginning in 2021. Comparable data collected by the ECDI are currently available for close to 80 countries. Countries with data on the proxy indicator collected with the ECDI will continue to be used for global SDG reporting until new data using the ECDI2030 are available.

Time series:

Not available

Disaggregation:

Sex

### 6. Comparability / deviation from international standards

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Sources of discrepancies:

The estimates compiled and presented at global level come directly from nationally produced data and are not adjusted or recalculated.

### 7. References and Documentation

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**URL:**

[data.unicef.org](http://data.unicef.org)

**References:**

<http://data.unicef.org/ecd/development-status.html>