1.3.3 Child Development: Early Identification

Percentage of children needing selected special education services in kindergarten who were not identified and connected to services prior to kindergarten[5]

THIS MEASURMENT IS IN DEVELOPMENT

Purpose

This measure provides insight into how well the service system identifies and responds to children's developmental needs. Children's developmental delays can be addressed best when they are discovered early. Identifying and addressing developmental needs prior to school entry leads to children being more likely to enter school ready to learn and succeed.

Definition

This measure estimates the percentage of five-year-olds (kindergarteners, up to age six) receiving special education services who were not receiving special education/early intervention services at age three.[6] Because many systems do not have unique identifiers for students spanning early childhood and school age databases, this measure proposes the use of cohort-level data. A cohort is a group of students that can be tracked as they advance through school. For example, five-year old kindergarten students in 2018 are the same cohort as three-year-old preschool students in 2016. When using cohort-level data, the data will include "noise," including: children who moved in or out of the cohort; children who received services at age three but no longer needed them at age five; or children who received services at age three and age five but who moved into the cohort at age four and so would appear unidentified. Since pilot results revealed a significant proportion of children receiving special education services in kindergarten who were not identified at age three, this noise is unlikely to be significant enough to create issues with interpretation. As the proportion shrinks, higher quality, student-level data may be necessary. Movements toward unique student identifiers by state departments of education and early care and education data systems could provide the opportunity for student-level data in the future.

For this measure, it is recommended that communities choose to look specifically at receipt of services for *Speech and Language Impairment* and *Autism* because we expect these two disabilities to be identified in children by age three. However, diagnoses selected for inclusion may vary by location. For example, age may vary, and disability categories used may vary, and communities with smaller populations may show very little data for privacy reasons.

> Numerator: Number of three-year-olds receiving special education services for Autism or Speech and Language Impairment

> Denominator: Number of six-year-olds receiving special education services for Autism or Speech and Language Impairment

Numerator/Denominator: Equals the percentage of three-year-olds receiving services at age five; to calculate unidentified/untreated, we subtract the percentage from one

Formula: 1—(numerator/denominator)

Data Notes: Communities should use a "cohort comparison" to look at roughly the same group of children over time. For instance, for school year 2016/17, pull 2016/17 data on five-year-olds and 2013/14 data on three-year-olds.

Alternative Definition for Communities with Kindergarten Readiness Surveys

Percentage of kindergartners whose teacher believes they have developmental needs but they do not have an individualized education program (IEP).

> Numerator: Number of children with an IEP

> Denominator: Number of children whose teacher believes have a developmental need

> Numerator/Denominator: Equals the percentage of children with a teacher-identified developmental need who have an IEP.

> Formula: 1—(numerator/denominator)

Implementation

Summary of Steps

▸ **Set intention:** Consider community goals, recent efforts, and constraints related to this area as a first step.

▸ **Obtain data:** Depending on data availability by state, these data may be readily available, or they may require a special request from the state department of education. While data availability by type of disability may vary by community, at minimum, communities should strive to include data on children receiving special education services for Autism or Speech and Language Impairment since children should be identified by age three for these disabilities. Request or obtain data that enables a "cohort comparison" (e.g., for school year 2017/18, pull 2017/18 data on the number of six-year-olds and 2014/15 data on the number of three-year-olds).

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[6] While most measures in the toolkit are intentionally framed in positive terms, in this instance we have made an exception; our pilot showed that the measure was more easily understood when framed as the proportion of children the system missed prior to Kindergarten, as opposed as the proportion of children the system identified early, before Kindergarten.

- **Interpret:** Analyze and interpret the data, considering data limitations such as duplication. Think about data trends and how they may be affected by related interventions or landscape factors in your community. If the gap is large or small, consider what is contributing to this – what are your screening rates, and what other data can be used to make sense of these results? Consider equity factors in your analysis if able to access disaggregated data.
- **Plan:** Determine what action should be taken as a result of the analysis, and record in action planning guide. Use this assessment as an entrée to a larger conversation to support system building between providers serving very young children and school-age educators/providers.

Stakeholders

This measure uses secondary, existing data sources, so does not require primary data collection. Stakeholder involvement to implement the measure is limited to the data analyst in the investigating agency. However, because data sources vary by state, there may be a need to request data from a state department of education on special education enrollment by age and disability.

Example from the Field

The table below provides an example of the components that go into the measure and how the results are presented as a calculated percent.

Percentage of Kindergarteners Unidentified, 2012/13-2016/17

	# 3YO	# 6YO	% Unidentified
2012/13	559	1077	48.1%
2013/14	494	1116	55.7%
2014/15	529	981	46.1%
2015/16	548	939	41.6%
2016/17	571	954	40.1%

Interpreting and responding to the results could involve a variety of stakeholders, including early intervention programs, health departments, early education and care providers, education departments, early childhood collaboratives, parent advisory groups, and others.

Data Sources

The data source is the state department of education, or kindergarten readiness survey for those using the alternative measure.

Limitations

There are considerations associated with this measure:

- State department of education data do not include: 1) children who are receiving private services only; 2) children who need but don't qualify for services; and 3) children who were in the district at age three but not age five (and vice versa).
- Without unique student identifiers, "noise" in the cohort data will limit a community's ability to see where the system succeeded by addressing identified developmental issues early, such that the children do not need special education services by the time they reach school.
- States may differ in terms of what agency is responsible for early intervention services. If this agency is not the department of education, or is not linked to the department of education, data for children at age three may not be available.

Opportunities

Additional opportunities include the following:

- Movements toward unique student identifiers by state departments of education and early care and education databases could provide the opportunity for student-level data in the future.
- Expansion of the use of kindergarten readiness surveys would offer more opportunities to use the alternative measure based on a kindergarten readiness survey.

Resources

- California Department of Education DataQuest—Communities that would like to see how data are presented by one state can examine the California Department of Education data portal, DataQuest. Select a geography (from statewide to individual schools), and then select Special Education from the Subject dropdown menu. Data can be presented by age, disability, grade, and race and ethnicity. Early intervention data are integrated with K-12 data, enabling the comparison presented in this measure.