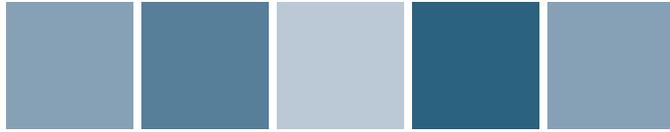




# Turning Curves for Vulnerable Children from Birth to Age 8 Action Guide

Shared Results and Measures



# About NREC

**T**he National Results and Equity Collaborative is a new and game changing approach to accelerating positive and equitable results for children, youth, families and communities throughout the United States. It enables networks of funders, technical assistance providers, intermediary organizations, public and private civic and service organizations, government and others to work together in greater alignment to help more vulnerable young people succeed from birth throughout adulthood.

## Our Purpose

As a newly formed voluntary organization, NREC aims to (1) accelerate positive results for vulnerable children throughout the country by creating a national network to align results-based TA, measures, effective strategies and solutions across multiple national and local initiatives; and, and in so doing, (2) promote consistency and greater impact in the use of results-based methodologies at the federal, state and local levels. As these elements are developed and tested, the collaborative will function as an open source peer network, with ever expanding circles of leaders testing and using this approach and sharing what they are learning with a network of peers throughout the country.

## Our Goals

By working closely together and recognizing that we are all in the same enterprise, NREC promotes alignment on several important dimensions of a results-based approach, including:

- A results and indicators framework that can serve as a common core to which communities and initiatives can add their unique additional indicators and/or language;
- A shared commitment to building community capacity, allowing multiple initiatives to generate evidence about how community capacities contribute to results;
- A willingness to share tools and materials that support strategy development and on an ever-increasing knowledge base; and
- A willingness to use a common “results and data aggregator” tool - the Results Scorecard - as a common approach and tool for capturing the process, beginning with an initial cohort of communities.

Made possible by a generous grant from the Annie E. Casey Foundation

## NOTE TO REVIEWERS

*Turning Curves for Vulnerable Children from Birth to Age 8: Shared Results and Indicators* is the first in a series of tools being developed by the partners in the National Results and Equity Collaborative, or NREC<sup>1</sup>.

This paper recommends a set of core results and indicators for communities working on improving results for children birth to age 8 (B-8). It grows from a recognition that:

- At the community level, focusing on a concise, manageable set of results and indicators leads to greater progress.
- Each community can move more rapidly to action by using a core set of indicators that are grounded in strong research.
- As national organizations committed to improving results for young children, the NREC national partners can offer a benefit to its network if we agree on a starting point set of results and indicators.\*

We offer this list as a launching point to accelerate local efforts to define and align common results and track progress across multiple initiatives. While there is value to common language and indicators that can be aggregated across sites, such as those in the following pages, communities are also encouraged to refine the list building on existing efforts and activating effective, coordinated and impactful strategies.

This document is a working draft. Before issuing it in final form, the NREC partners are seeking review by colleagues and partners. We invite:

- Your reaction to having a shared set of recommended results and indicators across multiple initiatives and efforts. Is this a useful idea? Does our goal of bringing more consistency to the work seem valid?
- Your reaction to these recommendations for core results and indicators for children B-8. What others would you add to or substitute for these?
- What information about these results and indicators as portrayed in this document is most useful to you? Least useful?\*

Please use the Review section of the NREC website to submit comments and suggestions. Thank you for your interest in this work and, most of all, for your efforts to improve results for children, families and communities.

<sup>1</sup> The founding partners, which include national organizations (Campaign for Grade-Level Reading, Center for the Study of Social Policy, Coalition of Community Schools, Literacy Funders Network, Promise Neighborhoods Institute at PolicyLink, Results Leadership Group and United Way Worldwide) and three partner communities (Camden, New Jersey; Salt Lake City, Utah; and San Antonio, Texas) have come together to align results-based tools, materials and technical assistance in the interest of accelerating the achievement of better results for children, families and communities at scale.

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## Introduction

This guide has been co-created by founding members of the National Results and Equity Collaborative (NREC) and informed by evidence, experts and experience. It is intended to serve as a resource to individuals, organizations, coalitions, policymakers and funders throughout the country who seek to achieve faster and greater results at greater scale in efforts to help the most vulnerable children and youth succeed in school and life.

NREC partners agree that aligning similar work - currently guided by slightly different definitions, measures and funding requirements, enhanced by coordinated technical assistance and knowledge - will accelerate progress and results across the country. Partners hope that many individuals, organizations, coalitions and funders will use these measures as a tool to promote a common impact language and shared methods for tracking progress across sites which focus on broad, population level results.

While we know that these results and indicators do not represent everything that will be measured in various B-8 initiatives, they provide a first step for aligning and being able to report on community-wide results across diverse organizations and initiatives. Most users will want to supplement this list with other indicators to capture the full story of their efforts to improve outcomes, as well as an array of process measures to manage activities.

An initial suite of resources developed by NREC includes:

1. A set of five, evidence based core results<sup>1</sup> for increasing success for vulnerable children B-8 and evidence based indicators of progress for each core result, including definitions, research

foundations, where to find the data and an evaluation of each indicator's data power, proxy power and communications power.

2. A guide for using Results Based Accountability or Outcomes-Focused Strategic Planning to Achieve Population Level Results.
3. Additional strategy and action tools and resources, many created and used effectively by NREC partners to turn curves for children B-8 (in development).

Additional tools and resources for effective community level results for vulnerable children from B-8 will be added periodically on the NREC website where colleagues can join and receive updates and opportunities to learn with and from peers.

As the NREC learns from communities who make use of these tools, partners envision an evolving series of guides that will eventually include results, measures, definitions and success strategies for vulnerable older children and youth and other result areas. In addition, NREC will focus on issues of equity, or how to eliminate opportunity gaps, especially when outcomes differ by race, ethnicity or economic status.

## How These Birth to Age 8 Results and Indicators Were Selected

NREC partners began with B-8 results and measures they were already using and agreed to begin with a set of five shared core results. A working group then conducted research on evidence-based indicators and developed criteria for inclusion, including each indicator's significance and communications, proxy and data power. NREC partners are currently working on a way to also rank the equity power of these indicators for future editions of this guide.

These results and indicators were then vetted by partners, experts, researchers and people working on the ground in communities, and represent the best current knowledge about what we must do to help more young children succeed. This guide is now being shared widely for additional review throughout the country.

## Why Indicators Matter

Indicators help researchers, policymakers and community leaders understand the prevalence and trends related to key components of children's well-being, and provide the means for assessing our shared accountability, as a nation, for their welfare. Because they typically refer to population-wide measures, indicators are more inclusive than measures pertaining to individuals participating in a particular program or system. Thus, indicators can inform a number of comprehensive initiatives concerned with promoting positive, and reducing negative, community-wide outcomes. Learn more *here*.

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1 Pathways Overview Strategies for Impact, Center for the Study of Social Policy, 2014.

## NREC Tools and Ongoing Learning

All who use these materials are invited to share their experiences and reflections with the NREC learning community through the website. We envision a growing collaborative network as users engage in peer learning and consider joining as partners or allies. We hope that these or similar tools will eventually be used at all levels - in communities, states and nationally, and adopted by funders and policymakers - so that we will all be able to tell more informed and compelling stories of success and what success requires - in human and financial capital.

## Core B-8 Results and Indicators

<b>RESULT:</b>	Families are strong and supportive
<b>INDICATOR:</b>	Families read regularly to their children
<b>RESULT:</b>	Births are healthy
<b>INDICATOR:</b>	Infants are born at healthy weight
<b>RESULT:</b>	Children are safe, healthy and developing on track
<b>INDICATOR:</b>	Children are free from unintentional injury
<b>INDICATOR:</b>	Children have access to a consistent primary health care provider.
<b>INDICATOR:</b>	Children with developmental concerns identified through screening who access needed treatment or services
<b>RESULT:</b>	Children are emotionally, socially and cognitively ready for school
<b>INDICATOR:</b>	Children enter school ready to succeed
<b>RESULT:</b>	Children perform on grade level
<b>INDICATOR:</b>	Children attend school or pre-school regularly
<b>INDICATOR:</b>	Children are reading on grade level
<b>INDICATOR:</b>	Children are performing math on grade level

## Results and Indicators

- A short list of indicators for each of the five core B-8 results.
- A definition of each indicator.
- Why it is significant.
- An assessment of its communication, proxy and data power (high, medium or low).
- Data sources for each indicator.

# Turning Curves for Vulnerable Children from Birth to Age 8 Action Guide Shared Results and Measures

## Example Scorecard: Full List of B-8 Results and Indicators

The screenshot displays the 'Results Scorecard' interface. At the top, there is a navigation bar with icons for Home, Scorecard, Reports, Admin, and Support. Below this is a secondary navigation bar with tabs for Scorecards, Results, Indicators, Programs, Performance Measures, Actions, and Tags. The main content area is titled 'Birth to Age 8 Shared Results and Indicators' and contains a list of results and their associated indicators.

Result	Indicator	Time Period	Actual Value	Current Trend	Baseline %Change
<b>R</b> Families are Strong and Supportive	<b>I</b> % of families reading regularly to their children	--	--	--	--
<b>R</b> Births are Healthy	<b>I</b> % of infants born at healthy weight	--	--	--	--
<b>R</b> Children are Safe, Healthy and Developing on Track	<b>I</b> % of children free from unintentional injury (fatal/non-fatal)	--	--	--	--
	<b>I</b> % of children having access to a consistent primary health care provider	--	--	--	--
	<b>I</b> # of children with developmental concerns identified through screening who access needed treatment or services	--	--	--	--
<b>R</b> Children are emotionally, socially and cognitively ready for school	<b>I</b> % of children entering school ready to succeed	--	--	--	--
<b>R</b> Children Perform on Grade Level	<b>I</b> % of children attending school or pre-school regularly	--	--	--	--
	<b>I</b> % of children reading on grade level	--	--	--	--
	<b>I</b> % of children performing math on grade level	--	--	--	--

The following contains excerpts from the Child Trends Data Bank. The full analysis with detailed citations is available at: [www.childtrends.org](http://www.childtrends.org)



**RESULT:** Families are strong and supportive

**INDICATOR:** Parents read regularly to their children

## Indicator Definitions

- The proportion of parents in a specific population who self-report that they have read to their child within the past week (National Household Education Survey).
- Percent of families reading to young children at least once a day (*FSG Markers That Matter 2.9*).
- For children birth to kindergarten entry, the number and percent of parents or family members who report that they read to their children three or more times a week (Promise Neighborhood Grantees — *GPRA 11*).

## Significance

Reading regularly to young children boosts literacy and social-emotional development, and increases the likelihood of later overall school success. Children develop literacy skills and an awareness of language long before they are able to read. Shared parent-child book reading during children's preschool years leads to higher reading achievement in elementary school, as well as greater enthusiasm for reading and learning.

Young children who are regularly read to have a larger vocabulary, higher levels of phonological, letter name and sound awareness, and better success at decoding words and understanding their meaning. The number of words a child knows and understands is an important indicator of later academic success. Children's vocabulary use at age three is a strong predictor of language skill and reading comprehension at ages nine to ten. Further, vocabulary use in first grade can predict more than 30 percent of eleventh grade reading comprehension.

Children who lack a strong foundation of language awareness and literacy skills early in life are more likely to fall behind in school, and are more likely to drop out.

## Indicator Power

Communication Power	High
Proxy Power	Medium
Data Power	Low

- Easily understood definition and general acceptance of indicator.
- Indicator likely to be responsive to short-term intervention.
- Reading offers a proxy for time spent engaged with child and may correlate with increased understanding of child development.
- Data source relies on parent report, so may be higher than actual, and is only available sporadically (NHES collects in 2007 and 2012).
- Indicator is required (GRPA) for all Promise Neighborhood grantees, so will not add to their data collection burden.

## Measures and Data Sources

Federal Interagency Forum on Child and Family Statistics. *America's Children: Key National Indicators of Well-Being, 2009*. Federal Interagency Forum on Child and Family Statistics, Washington, DC: U.S. Government Printing Office.

- Table ED1 - available at <http://www.childstats.gov/>

Raw Data Source: National Household Education Survey <http://nces.ed.gov/nhes/>

[survey conducted 2007 & 2012 - changed from phone survey to mail survey]

The following contains excerpts from the Child Trends Data Bank.  
The full analysis with detailed citations is available [here](#).



**RESULT:** Births are healthy

**INDICATOR:** Infants born at healthy weight

## Indicator Definition

- The proportion of live births of infants at 5 pounds, 8 ounces or more. Low birth weight refers to infants weighing less than 5 pounds, 8 ounces, and very low birth weight refers to infants weighing less than 3 pounds, 4 ounces.

## Significance

Low birth weight and prematurity are closely associated with the risk of infant mortality and later child health problems. Infants born at a low birth weight are also at increased risk of long-term disability and impaired development. Infants born weighing less than 5 pounds, 8 ounces are more likely than heavier infants to experience delayed motor and social development. Lower birth weight also increases a child’s likelihood of having a school-age learning disability, being enrolled in special education classes, having a lower IQ, and dropping out of high school. Risk for many of these outcomes increases substantially as birth weight decreases, with very low birth weight babies being most at risk. Being born with a low birth weight also incurs enormous economic costs, including higher medical expenditures, special education and social service expenses, and decreased productivity in adulthood. Learn more about the significance of birth weight [here](#).

## Indicator Power

Communication Power	High
Proxy Power	High
Data Power	High

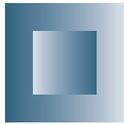
- The indicator is clearly defined and generally accepted as a vulnerability for poor health status.
- Birth weight may serve as a proxy for an array of risk factors including late prenatal care, maternal smoking or poor nutrition, fetal stress, infections, and violence toward the pregnant woman.

- Birth weight is a risk factor for future health concerns.
- Administrative data is collected and accessible for nearly all births and can be disaggregated to the city level.

## Measures and Data Sources

- Birth Data, National Vital Statistics System (city, state, nation)  
<http://www.cdc.gov/nchs/births.htm>

The following contains excerpts from the Child Trends Data Bank.  
The full analysis with detailed citations is available [here](#)



**RESULT:** Children are safe, healthy and developing on track

**INDICATOR:** Children are free from unintentional injury (fatal/non-fatal)

## Indicator Definition

- Deaths due to unintentional injuries are those in which the attending physician, medical examiner, or coroner rules that the death was neither a homicide, suicide, nor due to legal intervention (i.e., self defense or police action). Non-fatal unintentional injuries include “bodily harm resulting from severe exposure to an external force or substance (mechanical, thermal, electrical, chemical, or radiant) or a submersion” which was not intended.

## Significance

The toll of childhood injuries on society is staggering. Nearly 9,000 children—more than 20 a day—die annually in the U.S. because of such injuries. However, it is estimated that for every child death resulting from injuries, more than 1,000 children receive medical treatment or consultation for non-fatal injuries. In 2000, associated medical and other costs, including lost time at work by family members caring for injured children, totaled more than \$87 billion. Annual costs rise to more than \$200 billion when reduced quality of life for injured children and their families is included.

Unintended injuries are the leading cause of death and disability for children and adolescents in the U.S. Children and youth between 1 and 19 years old account for 37 percent of all deaths; for newborns and infants under the age of one year, they are the fifth leading cause. Although child injuries occur under diverse circumstances, motor vehicle crashes are the leading cause of fatal injuries, while falls account for the greatest proportion of non-fatal injuries.

Child Trends Data on fatal and non-fatal injuries tend to follow different patterns. Unintentional fatal injuries are most common among infants. The 2010 rates per 100,000 range from a high of 28.1 among children younger than one year, to a low of 3.7 among those ages five to nine. Suffocation is the most common type of fatal injury among infants (82 percent). Drowning is the most common cause of fatal injury among children ages one to four (31 percent). Fire and burn injuries are common among one- to four- and five- to nine-year-olds (11 and 12 percent of fatal injuries, respectively).

Rates for non-fatal injuries are highest among children ages one to four (13,796 injuries per 100,000, in 2011), with lower rates for children ages five to nine (8,896 per 100,000), and infants less than a year old (6,790 per 100,000). Falls are the most common cause between birth and age 14.

## Indicator Power

Communication Power	High
Proxy Power	Medium
Data Power	Medium

- Indicator is clear and reduction valued by the public.
- Unintentional injury may be a strong proxy for child safety.
- Administrative mortality data is reliable and publicly available.
- Hospitals maintain records of care for injuries, which may be difficult to access and align with data collection systems and is likely to be more timely or relevant at the local level.

## Measures and Data Sources

### Fatal Injury Data:

- Centers for Disease Control and Prevention, National Center for Injury Prevention and Control. (2012). WISQARS online, fatal injury reports. Available at: <http://www.cdc.gov/injury/wisqars/fatal.html>
- National Vital Statistics System [www.cdc.gov/nchs/deaths.htm](http://www.cdc.gov/nchs/deaths.htm)

### Non-Fatal Injury Data:

- Centers for Disease Control and Prevention, National Center for Injury Prevention and Control. (2012). WISQARS online, non-fatal injury reports. Available at: <http://www.cdc.gov/injury/wisqars/nonfatal.html>.
- National Electronic Injury Surveillance System-All Injury Program (NEISS-AIP) <http://www.cdc.gov/ncipc/wisqars/nonfatal/datasources.htm#5.2>

The following contains excerpts from Healthy People 2020 Leading Health Indicators. The full analysis with detailed citations is available [here](#)



**RESULT:** Children are safe, healthy and developing on track

**INDICATOR:** Children have access to a usual primary health care provider.

## Indicator Definition

- Percentage of children who receive health care that meets the criteria of having a medical home: child has a personal doctor/nurse; has a usual source for sick care; receives family-centered care from all health care providers; has no problems getting needed referrals; and receives effective care coordination when needed.
- Number and percent of children birth to kindergarten entry who have a place where they usually go, other than an emergency room, when they are sick or in need of advice about their health. (Promise Neighborhood Grantees — *GPRA 1*).

## Significance

Access to and utilization of quality health care greatly affects a child's health. Increasing access to both routine medical care and medical insurance are vital steps in improving the health of all Americans. Regular and reliable access to health services can prevent disease and disability, detect and treat illnesses or other health conditions, and increase life expectancy.

First introduced by the American Academy of Pediatrics (AAP), a medical home currently means a home base for any child's medical and non-medical care. Today's medical home is a cultivated partnership between the patient, family, and primary provider in cooperation with specialists and support from the community. AAP guidelines stress that care under the medical home model must be accessible, family-centered, continuous, comprehensive, coordinated, compassionate, and culturally effective.

Patient care associated with medical homes improves outcomes, such as health status, timeliness of care, family-centeredness and family functioning. The National Committee for Quality Assurance (NCQA) Patient Centered Medical Home recognition program standards provide a way to qualify and quantify care in the medical home. In some practices, scoring at NCQA higher levels has resulted in enhanced payment to the practice.

## Indicator Power

Communication Power	High
Proxy Power	Medium
Data Power	Medium

- The assumption that a consistent primary health care provider consistently provides health surveillance and linkages to specialists, including mental health providers may be false. Quality measures of the medical home will be an important compliment related to the communication power of this indicator.
- The existence of a regular source of health care is associated with on-going preventive care, screening, and early diagnosis and treatment.
- Some suggest that access to regular health care is a proxy for health and well-being, or timely treatment of chronic or acute illnesses.
- Administrative data from Medicaid Early Periodic Screening Diagnosis and Treatment (EPSDT) and State Children's Health Insurance Plan will provide a baseline for enrolled families or children.
- Insurance providers collect data about access and utilization of their populations which can be difficult to access.

## Measure(s)/Data Sources

- Child and Adolescent Health Measurement Initiative. 2007 National Survey of Children's Health, Data Resource Center for Child and Adolescent Health website. [www.nschdata.org](http://www.nschdata.org)
- Promise Neighborhood neighborhood survey (recommended by Urban Institute).

There is a National Center for Medical Home Implementation ([www.medicalhomeinfo.org](http://www.medicalhomeinfo.org)).

The following contains excerpts from the Child Trends Data Bank.  
The full analysis with detailed citations is available [here](#)



**RESULT:** Children are safe, healthy and developing on track

**INDICATOR:** Number of children with developmental concerns identified through screening who access needed treatment or services.

## Indicator Definition

- Percent of children classified as having been screened for developmental delay based on parent report that a doctor, health care provider or parent educator had them complete a questionnaire about specific concerns the parent had about the child's development, communication, or social behaviors. Additionally, the questionnaire had to address speech and social interaction behaviors.
- Of those identified for follow-up through screening, the percentage who access treatment or follow-up services.

## Significance

Developmental delays among young children can signal the presence of serious physical or psycho-social problems. Because development during infancy and toddlerhood is rapid and cumulative, the success of early intervention, both in human and financial terms, depends on early identification. It is estimated that 12 to 16 percent of US children have developmental or behavioral disorders. The majority are not identified before school entrance, and children living in poverty have the greatest risk of undiagnosed or treated health issues and/or developmental delays.

Early developmental screening of young children is an efficient, cost-effective way to identify potential health or behavioral problems and treat them early to prevent later, more costly interventions. Research has found that children who get screened are more likely to be identified with developmental delays, referred for early intervention, and be determined eligible for early intervention services. The American Academy of Pediatrics recommends routine screening, from birth to age five, to identify children with delays in language, motor, or cognitive development or with autism spectrum disorders.

## Indicator Power (communication, proxy, data)

Communication Power	High
Proxy Power	Medium
Data Power	Medium

- Strong face validity and communication power.
- Aligned with Federal emphasis on screening as a critical tool for monitoring and promoting child well-being.
- Screenings may be a proxy for on-going monitoring, early detection and effective connection to treatment or other interventions.
- 19 states with Help Me Grow initiatives have a growing database of screenings and their impact, which can be disaggregated to a local level.

## Measure(s)/Data Sources

National Survey of Children's Health.

- More information is available at the Data Resource Center for Child and Adolescent Health.
- Help Me Grow initiatives conducts surveys and tracks follow-up treatment when a referral is made.
- Additional resources about assessment tools available [here](#).

The following contains excerpts from the Child Trends Data Bank.  
The full analysis with detailed citations is available [here](#)



**RESULT:** Children are emotionally, socially and cognitively ready for school

**INDICATOR:** Children enter school ready to succeed

## Indicator Definition

The U.S. Department of Education defines *Kindergarten Entry Assessment* as an assessment that:

- Is administered to children during the first few months of their admission into kindergarten.
- Covers all essential domains of school readiness.
- Is used in conformance with the recommendations of the National Research Council reports on early childhood.
- Is valid and reliable for its intended purposes and for the target populations and aligned to the Early Learning and Development Standards.

School readiness is the state of early development that enables an individual child to engage in and benefit from kindergarten learning experiences. Children are “ready” for school when families, schools, and communities work together to ensure their developmentally-appropriate, age-level success across a variety of domains. Children’s development is influenced by interactions among a complex set of factors including biology, individual traits, family and community relationships, and culture (Texas Early Learning Council).

The number and percent of three-year-olds and children in kindergarten who demonstrate at the beginning of the program or school year age-appropriate functioning across multiple domains of early learning as determined using developmentally appropriate early learning measures. (Promise Neighborhood *GPRA 2*).

Child Trends Analysis: This report looks at parent reports of children’s competence in four cognitive and early literacy school readiness skills:(1) recognizing all letters; (2) counting to 20 or higher; (3) writing his or her name; and (4) reading or pretending to read. Based on NCES data.

## Significance

As conceptualized by the National Education Goals Panel, school readiness encompasses five dimensions:

- Physical well-being and motor development.
- Social and emotional development.
- Approaches to learning.
- Language development (including early literacy).
- Cognition and general knowledge. Although experts agree that social-emotional skills are also of critical importance for school readiness, to date there are no nationally representative data in this area.

Children who enter school with early skills, such as a basic knowledge of math and reading, are more likely than their peers to experience later academic success, attain higher levels of education, and secure employment. Absence of these and other skills may contribute to even greater disparities down the road. Throughout the country, the percentage of students disengaging in the middle years and dropping out of high schools mirrors the percentage of children not ready at kindergarten entry.

Unfortunately, most kindergarten assessment tools focus almost exclusively on language, literacy, and mathematics. Yet, there is substantial agreement about the importance of social-emotional development of young children before, during, and after the transition to formal schooling, and this domain is predictive of academic progress in other domains. In addition, there are few assessment tools that capture contextual aspects of children's early learning and development, including their cultural background, linguistic diversity, and special needs. In 2011, the Council of Chief State School Officers took the position that early child assessments conducted prior to, at the start of, and during kindergarten can be useful for a number of purposes *if done well*. Kindergarten readiness assessments should be used to directly support children's development and academic achievement to improve educational outcomes. To do so, kindergarten readiness assessment efforts should adhere to the following principles:

- Use multiple tools for specific multiple purposes.
- Address multiple developmental domains and diverse cultural contexts.
- Align with early learning guidelines and common core standards.
- Collect information from multiple sources.
- Implement in a systems-based approach.
- Avoid inappropriate use of assessment information, specifically including high-stakes decisions, labeling children, restricting kindergarten entry, and predicting children's future academic and life success.
- Use population level tools such as Early Development Instrument (EDI) to assess and improve community conditions that support positive early childhood development before young children enter school.

## Indicator Power (communication, proxy, data)

Communication Power	High
Proxy Power	Low
Data Power	Low, but improving

- School Readiness is a commonly used term and commonly accepted concept as a key outcome for children at age 5. However, it has not been clearly or consistently defined.
- School Readiness is actually an index of multiple measures. Kindergarten Entry Assessments often rely on proxies for School Readiness, typically focusing on cognitive measures related to early literacy and mathematics.
- As a result of federal initiatives such as Race To The Top, more states and communities are implementing data systems to capture some measure of school readiness.

## Measure(s)

A growing number of states and local communities are developing, piloting or implementation of new kindergarten entry assessments, spurred by new legislation and new funding opportunities, (e.g. Race to the Top - Early Learning Challenge funding and Enhanced Assessment Grants). Links to these efforts in 20 states can be found [here](#).

- In 2010, just 7 states (Alaska, Connecticut, Florida, Hawaii, Maryland, Minnesota, and Vermont) collected KEA data for the purposes of aggregating data at the state level.
- In 2012, 25 states required assessments during the kindergarten year. Of these, 12 reported assessing children at entry, 10 during the school year, and 3 at both at entry and during.
- In 2013, 34 states described plans for a KEA in their RTT-ELC applications; and 9 states that did not submit a RTT-ELC application have some type of KEA.

*Information and resources on developing state policy on kindergarten entry assessment (KEA) includes links to policies and procedures for states can be found [here](#).*

Connors-Tadros, L. (2014). Center on Enhancing Early Learning Outcomes.

The Early Development Instrument (EDI) a teacher-completed measure of children's school readiness at entry to kindergarten was designed to provide communities with an informative, inexpensive and psychometrically sound tool. The EDI was designed to assess outcomes of early development as reflected in children's school readiness and mapped to the neighborhoods children live in. This precise, population level tool enables communities to understand what they can and should do to improve readiness *before* children get to school.

Promise Neighborhood neighborhood survey (recommended by Urban Institute).

The following contains excerpts from the Child Trends Data Bank.  
The full analysis with detailed citations is available [here](#).



**RESULT:** Children Perform at Grade Level

**INDICATOR:** Children attend school or  
pre-school regularly

## Indicator Definition

- Percent of students not missing ten or more days of school during the year.

## Significance

Chronic absence is a measure of how much school a student misses for any reason. It is a broader measure than truancy, which only tracks unexcused absences. Chronic absence as early as kindergarten predicts truancy in subsequent school years. Students who are not in class have fewer opportunities to learn the material necessary for academic and professional success. Furthermore, chronic absence is predictive of other negative outcomes, including school dropout, substance abuse, and gang and criminal activity.

Chronic absenteeism is affected by various community- and school-level factors. For example, large schools have higher levels of absenteeism. Additionally, communities with students who perceive their schools as chaotic, boring, staffed with apathetic teachers, and lacking discipline policies for truancy have higher rates of chronic absenteeism. Chronic absence can also inform which families and neighborhoods need further support, since poor school attendance can be an early warning sign of challenging social, economic, and health conditions.

Various school-wide interventions have been successful in reducing absenteeism, including those with the following elements: requiring schools to communicate with families about attendance, celebrating good attendance with students and families, connecting chronically absent students with community mentors, and conducting attendance-focused activities.

## Indicator Power

Communication Power	High
Proxy Power	Medium
Data Power	Medium

- Indicator is easily understood and generally supported by the public and decision makers.
- The indicator is strongly associated with school success.
- Absenteeism may be related to family risks such as chronic health conditions, substance abuse, housing or employment instability or other issues.
- Absenteeism may be perceived as an individual behavior problem rather than resulting from school factors and systemic barriers.
- For school age children, the data is reliably collected by school systems, but establishing protocols for sharing data can be time consuming.
- Early childhood education programs may or may not collect attendance data.

## Measures

- The National Center for Education Statistics defines truancy (delinquent-level absenteeism) as missing ten or more days of school per year (some cities/schools districts, states, nation).
- The National Assessment of Education Progress (NAEP) survey has information on students missing three or more days in the past month, for these large school-districts: Atlanta, Austin, Boston, Charlotte-Mecklenburg, Chicago, Cleveland, Houston, Los Angeles, New York City, San Diego, and the District of Columbia. These data are collected biannually for fourth, eighth and twelfth grades.
- School administrative records.
- Attendance Works ([www.attendanceworks.org](http://www.attendanceworks.org)) has resources for preschools, schools, families and policymakers on how to address chronic absenteeism.

The following contains excerpts from the Child Trends Data Bank.  
The full analysis with detailed citations is available [here](#).



**RESULT:** Children perform on grade level

**INDICATOR:** Children are reading on grade level

## Indicator Definition

- Reading proficiency refers to performance on the National Assessment of Educational Progress (NAEP) Reading Assessments. Scale scores range from 0 to 500, with a standard deviation of 100. In fourth grade, a score of proficient means that a student can read and understand what they are reading necessary for further learning. In 1996, NAEP started allowing testing accommodations for students with disabilities and for limited English proficient students. Accommodations may include extra time, one-on-one administration, use of magnifying equipment, translation of assessments, or the use of bilingual dictionaries and are determined by state and district policies. Beginning in 2002, all NAEP assessments allow accommodations. Only students currently enrolled in school are assessed.

## Significance

Reading is a fundamental skill that affects learning and performance in many school subjects. It also predicts the likelihood of graduating from high school and attending college. Additionally, proficiency in reading predicts career success; strong reading skills protect against unemployment in early adulthood; and scores on adult literacy tests predict wages. Given these implications, it is important to promote and assess early success in reading.

Low family income is associated with lower reading scores for children. This and other factors may account for the significant differences in reading ability across diverse groups, with Caucasian and Asian-American students consistently performing better than African American and Hispanic students at all age levels, commonly known as the achievement gap.

## Indicator Power

Communication Power	High
Proxy Power	High
Data Power	Medium

## Measures

The National Assessment of Education Progress has information on proficiency in reading in fourth and eighth grades, at the school district level for the following large districts: Atlanta, Austin, Boston, Charlotte-Mecklenburg, Chicago, Cleveland, Houston, Los Angeles, New York City, San Diego, and the District of Columbia. Data for NAEP are collected every other year.

The following contains excerpts from the Child Trends Data Bank.  
The full analysis with detailed citations is available [here](#).



**RESULT:** Children perform on grade level

**INDICATOR:** Children are performing math on grade level

## Indicator Definition

- Mathematics proficiency is defined as performance on the National Assessment of Educational Progress (NAEP) main assessment and is measured by average scale scores.

## Significance

Math proficiency is also essential for daily life functioning and is becoming more important in an increasingly technological workplace. Students who take higher-level math courses are more likely to attend and complete college. Mathematics competence is also related to higher levels of employability as well as higher earnings in adulthood.

Though mathematics proficiency scores have risen recently for all ethnic groups, Caucasian students continue to outscore their African American, Hispanic, and American Indian counterparts. And Asian-American students score above all other groups. Given these demographic disparities, it is important to examine socioeconomic and community-level factors that are potential sources for differences.

## Indicator Power

Communication Power	Medium
Proxy Power	High
Data Power	Medium

- Communication power is strong for school age children, and less well understood for young children (pre-mathematics skills).
- Math performance may serve as a proxy for overall academic success and absence of behavioral challenges.

- Data collected at the school level may not be comparable across school districts.
- NAEP provides a reliable population measure, not disaggregated to the local level.

## Measures

- The National Assessment of Education Progress has information on proficiency in mathematics in fourth and eighth grades, at the school district level for the following large districts: Atlanta, Austin, Boston, Charlotte-Mecklenburg, Chicago, Cleveland, Houston, Los Angeles, New York City, San Diego, and the District of Columbia. Data for NAEP are collected every other year.
- Each grade level and each subject area has criteria for achievement-level, categorized as basic, proficient, or advanced. This represents what students *should* know. Scale scores range from 0 to 500, with a standard deviation of 100.
- U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics. National Assessment of Educational Progress Reading and Mathematics Assessments (NAEP), 2011, 2009, 2007, 2005, 2003, 2000, 1996, 1992, and 1990 Mathematics Assessments. Accessed through the [NAEP Data Explorer](#).



## APPENDIX A: Responses to Feedback on Drafts

### Note to Reviewers

This guide is being shared as a review draft to solicit the broadest and best thinking of those who see value in aligning measures, definitions, results and technical assistance across multiple initiatives all working toward similar goals. This first guide focuses on results for children from B-8, as described in the introduction to the guide.

As additional comments and suggestions are received, they will be reviewed by NREC partners and incorporated into revisions and/or addressed in the **Responses to Feedback** section of the NREC website [here](#).

The following summarizes comments and responses received as of September, 2014.

### General Comments

#### Useful Structure – definition, significant, power, available data

The guide itself becomes an educational piece with clear language to capture a rigorous result-based approach to measuring impact. The design and internal consistency of the guide is important.

## Expectations on Use of the Guide

While NREC partners are encouraged to help inform community leaders about the availability of the guide, there is no expectation that communities, other than the first three founding partner communities (Camden, NJ, Salt Lake City, UT, San Antonio, TX) will be expected, instructed or required to use these indicators. Most NREC founding partners do not have the authority to set accountability requirements. All partners recognize that communities are already doing work on indicators that can be enhanced but should not be derailed.

The objective is to have guidance and support around a small set of indicators which prove valuable for stakeholders, to help build a cohort of communities that can demonstrate the potential value of common indicators across initiatives and communities (i.e aligning interventions and results, building local capacity, communication and messaging).

Supplemental technical assistance tools supporting effective B-8 work from founding partners will also be shared on the NREC website [here](#) in the coming months.

## Limited data availability

For some of the proposed indicators, data availability at the local level is extremely limited. Consistent data sources will be an on-going challenge for communities and NREC partners and allies. Still, there are communities using each of the indicators, and we will be learning from them how they collect data (or where they face the greatest challenges) and sharing what is learned. The Promise Neighborhood Institute/Policy Link and the Urban Institute are promoting strategies for local surveys to monitor measures with low data power.

## Equity Power of Indicators

Various stakeholders are excited about the opportunity to develop this component of indicator power. We need to be clear and strategic about what is presented in this guide, even as an equity power scale is developed. One component of equity power is the ability to disaggregate measures. The Child Trends Databank offers a very nuanced implication for subpopulations (race, income, gender, etc.) when available in the literature which may provide a useful starting point.

## Responses to Comments on Proposed Results and Indicators:

### Percent of Parents Regularly Reading to Their Children

Typically, the data for this indicator is based on parent report which has raised concerns about validity (or response bias). This indicator is a direct measure of a behavior with documented impact on child well-being and clearly communicates what works to improve outcomes. Both the Campaign for Grade-Level Reading and Promise Neighborhoods include this indicator as a foundational impact measure, thus are already collecting relevant data.

Suggested alternative indicators, including education level, income level, or employment of parents/caregivers are also related to family stability and well-being. However, they do not speak to the diadactic relationships that are related to bonding with very young children and the interpersonal environment that promotes health child development.

### Births are Healthy and Well-Timed

The concept of well-timed incorporates family planning and intentional pregnancies. The proposed indicator: infants born at healthy weight, can be disaggregated by age of parents for communities focusing on teens.

Focusing on the birth of the child emphasizes a strength-based approach and has strong communication power for a wide array of audiences. Suggested alternative indicators focus on more limited facets of this result. Access to prenatal care emphasizes health care interventions. Births to teenage mothers addresses only a portion of the population, focuses on a problem, and may be vulnerable to misinterpretation.

### Children are Safe, Healthy and Developing on Track

Child safety is a foundational outcome for many community initiatives and resonates strongly with the public. Therefore, it feels critical to include an indicator related to safety. Reviewers raised concerns about using the **percentage of children free from unintentional injury** as the indicator of child safety both because the data is difficult to get and suggests that parents are at fault for accidents. Building on the work of the Centers for Disease Control, this indicator provides a starting point for a structured surveillance of unintentional injury (data sources and communication tactics). This indicator also engages the public health sector and points to interventions at the community level, as well as at the family level. Many state health departments or Safe Kids Campaigns collect and share data on unintentional injuries.

Several reviewers have proposed using a measure of child abuse or neglect (reports, substantiated cases, etc.) as the indicator for safety. Rates of child abuse or neglect are commonly used by communities, largely because the child welfare agency data is easily available at local levels. However, involvement in the child welfare system is strongly correlated with race and income levels. Data show that most children of color come to the child welfare system's attention due to neglect allegations, which are largely situational. Unfortunately, neglect continues to be an area where families of color are more vulnerable because of tremendous administrative discretion in how it is evaluated. This indicator is problem-based and emphasizes negative perceptions of the community.

We will revise the indicator for developmental delay to focus on identification and follow-up - perhaps **percentage of children with identified developmental delays who receive needed follow-up services**. This indicator becomes more complex because the denominator becomes the population of children with identified developmental delays, which assumes effective screening strategies. Still, the data is more related to the desired result rather than a process measure of whether or not a screening was performed. Data is available in communities with Help Me Grow initiatives and effective developmental surveillance is a priority of the U.S. Department of Health and Human Services.

## Children are Emotionally, Social and Cognitively Ready for School

Reviewers proposed an alternative or additional indicator of participation in formal early education. While the relationship between experience in early care and education and school readiness is well documented, the NREC indicators are results-based and not defined by program capacity or experience. In addition, this indicator seems to promote only strategies that increase capacity of formal care settings and ignores the large number of children who come to kindergarten without this experience.

Other initiatives, including the federal Race To The Top - Early Learning Challenge, are actively focusing on assessment strategies that capture a measure of school readiness across domains. A recent report on twenty states using RTT-ELC funds documents the status of kindergarten entry assessments [here](#).

NOTES

## NOTES

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