

Early childhood development data systemsⁱ

Colin Almeleh,ⁱⁱ Katherine Hall,ⁱⁱⁱ Sonja Giese,^{iv} Nicholas Dowdall^v & Janeli Kotze^{vi}

Good quality data are vital for planning, programme implementation, monitoring and accountability. But the significant efforts and costs of collecting data are only worthwhile if the data are used effectively.

South Africa has invested in improved monitoring and reporting systems over the past two decades especially in those sectors where there are significant amounts of public

funding e.g. social protection, health and basic education. South Africa has also demonstrated its ability to rapidly develop and deliver administrative information systems, and to do this at scale, as was demonstrated by the development and implementation of the COVID-19 Electronic Vaccination Data System. While progress is being made in the early childhood development (ECD) sector to improve information

Table 28: Key components of an ECD information ecosystem

Type of data	Method of data collection	Example use cases
Population monitoring		
Censuses	<ul style="list-style-type: none"> National Census Early Childhood Development Census 	Provides information on children's demographics, socio-economic conditions, trends, disparities, and inequalities, and supporting evidence-based policymaking, planning, research and advocacy, and international comparisons.
Population-level surveys	<ul style="list-style-type: none"> General Household Survey Demographic and Health Survey Thrive by Five Index National Income Dynamics Survey 	Facilitate more regular sample-based data collection that usually focus on specific domains. Can help planners determine trends in between less frequent censuses and do relational analysis.
Administrative data	<ul style="list-style-type: none"> District Health Information System Social Pensions Data System South Africa Schools Administration and Management System Early Childhood Administration and Reporting System 	Provide a more 'real-time' monitoring perspective that enables decision-making at various levels, e.g. from national level right down to that of an individual school or clinic. They should enable administrators to perform their duties effectively and while enabling system-wide resource allocation and planning.
Population registers	<ul style="list-style-type: none"> National Register for Sex Offenders Child Protection Register 	Risk assessment and screening for individuals applying to work with children.
Implementation monitoring		
Monitoring specific programmes	<ul style="list-style-type: none"> Three Interlinked Electronic Register (TIER.NET) 	Monitors specific programmes such as access and use of antiretrovirals for children and pregnant women. TIER.NET is linked into the DHIS.
Monitoring individual children's development		
Developmental monitoring and screening	<ul style="list-style-type: none"> Road to Health Book 	Patient-held record to monitor developmental milestones from birth to six years old. Enables immunisation tracking, early detection of developmental delays or disorders, referrals for further intervention. Should ideally be linked into routine information systems.

ⁱ This chapter draws heavily from the South African Early Childhood Review series, particularly the 2024 edition. Source: Hall K, Almeleh C, Giese S, Mphaphuli E, Slemming W, Mathys R, Droomer L, Proudlock P, Kotze J, Sadan M. *South African Early Childhood Review 2024*. Cape Town: Children's Institute, University of Cape Town and Ilifa Labantwana

ⁱⁱ Ilifa Labantwana

ⁱⁱⁱ Children's Institute, University of Cape Town

^{iv} DataDrive2030

^v Lego Foundation

^{vi} Department of Basic Education

systems, it lags significantly behind the health, education and social security sectors, especially in the areas of early learning, disability, caregiver support and child protection.

This chapter assesses the ECD information landscape in the context of South Africa's international and domestic commitments, and the Nurturing Care Framework. While not exhaustive, it aims to highlight important missing indicators, data sources and systems – particularly the lack of a child-level information system that tracks children across all services and departments and over time. The chapter focuses mainly on population-level data rather than data arising from research studies. Finally, the chapter reflects on the major progress that has been made to build an information ecosystem for early learning.

What kind of data is needed to improve ECD service delivery and child outcomes?

There are a range of data sources that are considered essential to the design of an information system that can enable population-level planning, monitoring and measurement, and when taken together will allow countries to assess progress towards ensuring all young children are developmentally on track. There are also a range of data users. While government and funders are often thought of as the primary data users and consumers, those designing and delivering services need data that are accessible, understandable and actionable. While not exhaustive, Table 28 describes some of the various components of the ECD information ecosystem, their data collection methods and use cases.

Table 29: International data commitments

Commitment	Reporting and data commitments	Sample indicators
UN Convention on the Rights of the Child¹	Periodic reporting (five-year cycles) on a broad range of indicators to assess the well-being of children and their rights.	<ul style="list-style-type: none"> Under-five mortality rate Percentage of children living below the national poverty line Access to social protection
UN Convention on the Rights of Persons with Disabilities²	Periodic reporting (four-year cycles) on legislative measures, policies and programmatic activities to promote and protect the rights of persons with disabilities.	<ul style="list-style-type: none"> Percentage of learners with disabilities enrolled in mainstream school Percentage of public buildings that are accessible
Sustainable Development Goals 2030³	Voluntary national reviews every two to four years. Reporting includes a wide range of ECD relevant indicators across nutrition, safety and security, education and health.	<ul style="list-style-type: none"> Stunting prevalence in children 0 – 59 months Maternal mortality ratio Percentage of children (36 – 59 months) receiving at least one year of a pre-primary education programme Percentage of children aged 24 – 59 months who are developmentally on track in health, learning and psychosocial well-being
African Union Agenda 2063⁴	Agenda 2063 has seven aspirations, reported on bi-annually, each with high-level goals, targets and indicators. Many relate to early childhood development, and are aligned with the SDGs.	<ul style="list-style-type: none"> Percentage of population with access to safe drinking water Neonatal mortality rate

Note: This list of international commitments relevant to early childhood development is not exhaustive.

What are South Africa's international reporting commitments?

Table 28 describes the spectrum of data sources that strengthen South Africa's ability to monitor and improve service delivery for young children and their families, and that track progress towards South Africa's domestic and international goals. These commitments include, among others: the Sustainable Development Goals (SDGs); the African Union Agenda 2063; the United Nations (UN) Convention on the Rights of the Child, and the UN Convention on the Rights of Persons with Disabilities as outlined in Table 29. These commitments help to frame the country's ECD policies, programmes, and interventions, and reporting on these allows for cross-country comparison and accountability from an international perspective.

How can we build a monitoring and evaluation system for ECD in South Africa?

Previous chapters in this *Child Gauge* have described challenges in assessing the extent to which children are receiving essential services and achieving desired developmental milestones. Previous authors have also reflected on the implementation of the National Integrated Early Childhood Development Policy (NIECD Policy), highlighting the complex service delivery landscape where multiple departments and levels of government are responsible for various components of the comprehensive package of essential ECD services. Despite the NIECD Policy being approved by Cabinet in 2015, a final monitoring and evaluation framework for the policy has

never been published. It is unclear how progress is assessed, especially by the various coordination and leadership structures established by the NIECD Policy, such as the ECD Inter-Ministerial Committee, ECD Inter-Departmental Committee, and ECD Inter-Sectoral Forum.

What indicators and data sources are already in place?

The development of a robust monitoring and evaluation framework for the NIECD Policy is only one of a number of frameworks that need to be in place to ensure a robust ECD information ecosystem – that responds to the imperatives of planning, resourcing, programme monitoring, measurement and accountability. This should include measures to assess the delivery of services and the well-being of children and their caregivers across different sectors and domains, and enable government to report on its international commitments. In the absence of an official framework for analysing early childhood development, the Nurturing Care Framework is a useful organising framework to assess and benchmark whether core indicators of early childhood development in South Africa are available and of good quality.

Table 30 lists a comprehensive set of data sources available in South Africa that are currently or can be used to monitor early childhood development as it is conceptualised across the various domains of the Nurturing Care Framework. For example, the ECD Baseline Audit includes data on nutrition, health and early learning, but not on safety and security and responsive caregiving. It can be argued that this extensive list of data sources for early childhood development are very close to being sufficient to meet South Africa's international reporting commitments as illustrated by South Africa's ECD Country Profile in Figure 27. A similar picture exists in terms of domestic reporting commitments.

How can the ECD data ecosystem be further strengthened?

The section below describes the current data sources on different domains of child development with a view to identifying the missing data elements and sources required to provide a comprehensive picture of early childhood development in South Africa. It also identifies new data collection systems that need to be put in place and changes to existing sources and systems in order to improve service delivery and accountability.

A cross-cutting issue is that child identification numbers are not consistently used across all government administrative

systems. This makes it impossible to track children across the essential package of services offered by the departments of health, basic education, social development and others. It is also impossible to monitor children's progress and ensure that they are receiving the necessary support.

Information on children under six years old and their caregivers in South Africa

Nationally representative data from the National Census and General Household Survey (GHS)^{vii} are the bedrock of population-level data collection in South Africa. These two data sources provide the most relevant information on the general living conditions of households and children e.g. population figures, household and caregiving characteristics, household income and employment, hunger, etc. While the Census is only conducted every 10 years, it provides the most reliable estimates of the young child population across the country, which enables planning and appropriate budgeting for services. The GHS is arguably the most important annual source of information on living conditions, and it allows progress to be measured year-on-year. However, the GHS does not allow for analysis at district level and below. The National Income Dynamics Study (NIDS) is another critical tool for informing policy development and evidence-based decision-making for child and family well-being in South Africa. The panel study, run on a bi-annual basis since 2008, collects comprehensive data on income, health, education, employment and other socio-economic indicators, providing valuable insights into the factors that impact child and family well-being.

At an international level, there have been several developments to address the lack of standardised, nationally representative and internationally comparable data on early childhood development. The UNICEF-initiated Multiple Indicator Cluster Survey (MICS) has proved a valuable tool for collecting data on the well-being of women and children in over 100 countries. But South Africa has elected not to conduct the MICS survey. This means that the country does not have a full set of internationally comparable indicators focused on the well-being of women and children. This makes it difficult to track South Africa's progress towards the SDGs and to benchmark and compare South Africa with other countries.

Maternal and child health information

South Africa has a comprehensive District Health Information System (DHIS) that provides aggregated routine (monthly) and primary care data from the public sector clinics and

vii The GHS is a nationwide survey administered by Statistics South Africa to collect data on the socio-economic characteristics of households. The survey is conducted through face-to-face interviews with randomly selected households, where a representative from the household acts as the respondent, providing information on behalf of the household members.

Figure 27: South Africa ECD Country Profile – Countdown to 2030

EARLY CHILDHOOD DEVELOPMENT

2023 updates



South Africa

Countdown to 2030

Women's, Children's & Adolescents' Health

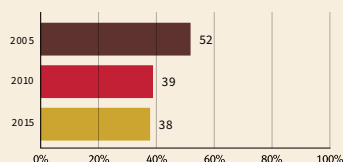
Demographics

Population	59,893,886
Annual births	1,155,858
Children under 5	5,818,687 (10%)
Under-five mortality	33/1,000

Threats to Early Childhood Development

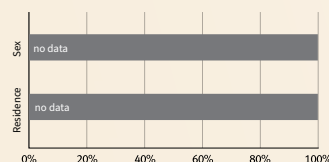
Maternal mortality	127/100,000	Adolescent birth rate	41/1,000
Low birthweight	17%	Preterm births	8%
Child poverty	no data	Under-five stunting	23%
Violent discipline	no data	Inadequate supervision	no data

Young children at risk of poor development



At risk in 2005, 2010 and 2015, using a composite indicator of under-five stunting or poverty

Risk by sex and residence



Children with functional difficulty



Children developmentally on-track

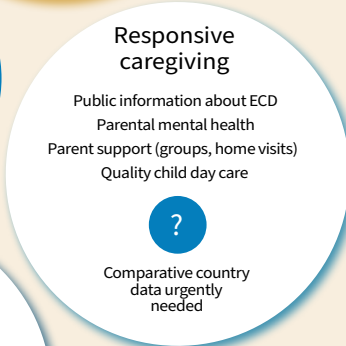
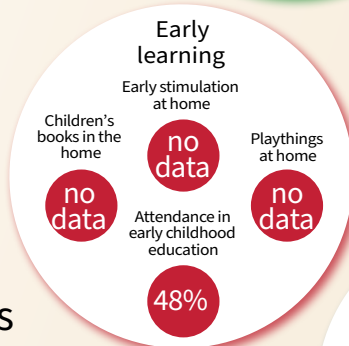
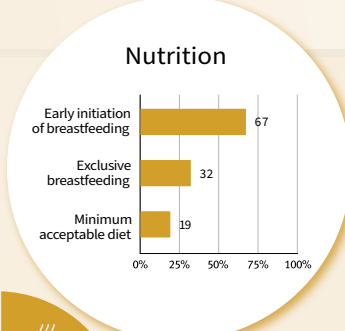
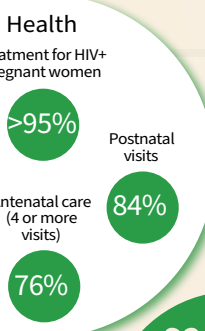


Support and services for early childhood development: Nurturing care

Parents and caregivers need a facilitating environment of laws, policies, services and community support to assist them in providing their young children with nurturing care.

Facilitating environments

Policies				
3	Officially adopted national multisectoral ECD policy			
<20%	20-39%	40-59%	60-79%	≥80%
Child and family social protection				
None	<14	14 - <18	18 - <26	≥26
Maternity leave (weeks)				
None	<14	14 - <18	18 - <26	≥26
Paternity leave (weeks)				
Not	Slightly	Moderately	Substantially	
International Code of Marketing of Breastmilk Substitutes (alignment)				



International conventions

3	Convention on the Rights of the Child
3	Convention on the Rights of Persons with Disabilities
3	CRC Optional Protocol on the Sale of Children, Child Prostitution and Child Pornography
3	Hague Convention on Protection of Children and Cooperation in Respect of Intercountry Adoption

DETAILED COUNTRY DATA SOURCES AND FOOTNOTES CAN BE FOUND IN THE MASTER DATABASE AT [NURTURING-CARE.ORG](https://nurturing-care.org)

Source: Nurturing Care for Early Childhood Development. *Country Profiles for Early Childhood Development: South Africa: 2023*. Accessed: 28 June 2024. Available from: <https://nurturing-care.org/south-africa-2021/>.

district hospitals. The DHIS tracks data related to antenatal care, postnatal care, immunisation, vitamin A and deworming, among other maternal and child health indicators. The annual publication of the District Health Barometer by the Health Systems Trust demonstrates the depth and breadth of the indicators captured by the DHIS and the ways in which having this information allows for detailed analysis to support decision making by the Department of Health (DoH) and others. However, there are some areas where DHIS is lacking:

- The DHIS does not collect and track data at the individual level except for the TIER.NET system which collects information on individuals on antiretroviral treatment.
- Data on maternal mental health is limited despite the increasing evidence of its impact on maternal and child health and development outcomes.
- Quality of care data are important but difficult to collect.
- There are no routine data collected on children with disabilities or developmental delays. Data on the numbers of

children screened for disabilities and developmental delays and referred for higher levels of care or specialised services is limited. The Child Functioning Module, developed by the Washington Group/UNICEF, could be used at a population level to provide a proxy indicator of disability among children aged 2 – 4 years and 5 – 17 years.

- One of the ultimate goals of the provision of health services is to reduce mortality. The DHIS data collects information on in-facility mortality rates and case fatality rates. However, this is not generalisable, partly because many young child deaths occur outside health facilities.
- Infant and under-five mortality rates are drawn from the Rapid Mortality Surveillance Report using data from the National Population Register. These rates cannot be disaggregated to a provincial or district level.
- Child deaths in hospitals are audited by the Child Health Problem Identification Programme to identify modifiable causes of death and drive quality improvement. The Child

Table 30: Sources of data for early childhood development in South Africa, mapped against the Nurturing Care Framework

	Last year	Frequency	Lowest level	N	H	EL	SS	RC
National Population Census – Statistics South Africa	2022	10-yearly	Ward	x	x	x	x	x
General Household Survey – Statistics South Africa	2022	Annual	Province	x	x	x	x	X
Governance, Public Safety and Justice Survey – Statistics South Africa	2022/3	Periodic	Province				x	x
National HIV and Syphilis Prevalence Survey – Statistics South Africa	2013	Annual	Province		x			
District Health Information System – Department of Health	2023	Routine	District	x	x			
South Africa Demographic and Health Survey – Statistics South Africa	2016	Periodic	Province	x	x			
Rapid Mortality Surveillance Report – Medical Research Council	2020	Annual	National		x			
South African National Health & Nutrition Examination Survey (SANHANES-1)	2012	Periodic	Province	x	x			
Social Grants Payment System (SOCPEN) – South African Social Security Agency	2023	Routine	Province				x	
South African National Nutrition and Food Security Survey – HSRC	2023	Periodic	Province	x	x		x	
Trends in International Mathematics and Science Study (TIMMS)	2015	4-yearly	National			x		
Thrive by Five – Department of Basic Education and DataDrive2030	2021	3-yearly	National	x		x		
ECD Census – Department of Basic Education	2021	Periodic	Municipal			x		
ECD Audit Baseline – Department of Basic Education	2021	Once off	Province	x	x	x		
Community Survey – Statistics South Africa	2016	Periodic	Municipal	x	x	x	x	x
Progress in International Reading and Literacy Study (PIRLS)	2023	5-yearly	National			x		
Three Interlinked Electronic Register (TIER.NET)	2023	Routine	Individual		x			
National Income Dynamics Survey (NIDS) and NIDS-CRAM	2021	Periodic		x	x	x	x	x

Note: Drawing on the Nurturing Care Framework: N = nutrition; H = health; RC = responsive caregiving; SS = safety and security; EL = early learning.

Death Review Project provides a similar analysis of out-of-hospital deaths, but is limited to the Western Cape.

Nutrition information

Accessing up-to-date information on child nutrition in South Africa remains challenging despite its importance from a human rights and an early childhood development perspective. Data from annual surveys such as the GHS allow for analysis of trends in child hunger over time. Tracking trends in under- and over-nutrition is more challenging and resource intensive. For example, stunting data are not routinely collected through the DHIS, and the stunting data collected by nutrition surveys are not always disaggregated by age despite studies showing that stunting rates are higher among younger children.⁵

A number of nationally representative surveys over the past 15 years have included anthropometric measures (e.g. weight-for-age, and height-for-age). The South African Health and Nutrition Examination Survey (SANHANES)⁶ and the Demographic and Health Survey (SADHS)⁷ include anthropometric measures together with questions about dietary intake (e.g. breast- and complementary feeding). SANHANES was last conducted in 2012 and the report published in 2015, and there have only been two SADHS surveys in the past 20 years (2003 and 2016). The most recent nationally representative study to measure the prevalence of stunting is the National Food and Nutrition Security Survey (NFNSS) conducted between 2021 and 2023 by the Human Sciences Research Council (HSRC) and commissioned by the Department of Agriculture, Land Reform and Rural Development.⁸ While all of these studies are necessary, and most importantly point to high levels of malnutrition in South Africa, it is difficult to monitor trends over time and evaluate the impacts of policies and programmes designed to improve food security and nutrition. This is because these surveys do not use comparable methodologies and sampling strategies, are often

not nationally representative, do not have large enough sample sizes or are not repeated regularly.

Information on responsive caregiving

South Africa tracks a range of indicators on adult co-residence and a limited number on caregiving practices (i.e. attending to the needs of, and providing assistance, care and love to a child) through national household surveys. Between 2017 and 2019, the GHS collected useful information on caregiving practices such as frequency of book sharing and singing with children. These caregiving questions in the GHS were stopped during COVID-19 and it is unclear whether they will be reintroduced in the future. However, there is limited information on the services that are provided to caregivers, nor is there a standard set of indicators on which policy and programmes can draw to design and monitor services. Publications such as the *South African Early Childhood Review* compile indicators for which there is available data, but these are inadequate to properly gauge the ways in which parents are supported.¹⁰

Key challenges relating to caregiving support data include:

- There is a lack of data on the provision of support, information, and advice to pregnant women and mothers. Information on the quality of antenatal and postnatal services can only be drawn from the periodic DHS where indicators include specific antenatal services.
- There are no routinely collected national data on maternal mental health challenges and screening (including screening for domestic and intimate partner violence, and alcohol and substance abuse).
- There is partial data on the availability of parent support programmes, their identified target groups, reach, and parenting outcomes. While not widespread or necessarily exhaustive, recent efforts to collect data on parent support programmes, include a study commissioned by UNICEF and the Department of Basic Education (DBE), that gathered

Box 8: Recent research partnerships between government, academia and civil society that are updating the knowledge base on malnutrition

- The DBE's Thrive by Five Index,⁹ collected anthropometric data (height-for-age) from 5,129 children aged 50 – 59 months attending early learning programmes
- The National Dietary Intake Survey 2022 is primarily focused on adults, but includes children attending schools and ECD programmes
- Grow Great, a national zero-stunting initiative, has conducted community nutrition surveys in all nine provinces in particularly high-risk districts
- The DG Murray Trust partnered with the Western Cape Department of Health to conduct a provincial-level comprehensive anthropometric malnutrition profile
- The HSRC and Department of Agriculture, Land Reform and Rural Development conducted the nationally representative National Food and Nutrition Security Survey between 2021 and 2023.

information from 97 organisations offering various types of parent support programmes.¹¹

- Support for primary caregivers is often narrowly conceptualised as face-to-face parenting training programmes. Parent support provided by the DoH is not included in government reporting. These programmes include: the community health worker programme, clinic-based breastfeeding counselling, or the Side-by-Side communication campaign. These are all part of a broader constellation of support for caregivers, yet are missed opportunities for reporting.

Safety and security information

SOCPEN is the data system used by the South Africa State Security Agency (SASSA) and the Department of Social Development (DSD) to run their comprehensive system of social grants. This legacy system from the 1980s is remarkable as it has the capability and functionality to administer the six major grants and interact with a number of other government systems. In some respects, SOCPEN sets the example of what a functional management information system in South Africa could be like. The system manages the application and distribution of around 20 million social grants on a monthly basis and integrates with other government information systems e.g. the National Population Register. During COVID-19, SOCPEN was also linked

to the Learner Unit Record Information and Tracking System (LURITS) and the National Student Financial Aid Scheme (NSFAS) to ensure that all eligible learners from low-income households could access additional government support. There are a number of critical areas in the social protection service portfolio on which we have limited information. For example:

- Routine national data on the prevalence of child abuse and neglect is needed. Stats SA has recently launched “Child Series Volume 1 – Children Exposed to Maltreatment”, which uses the GHS and Governance, Public Safety and Justice Survey data to produce a population-level analysis of child maltreatment in South Africa.¹² While the surveys are critical to monitoring and measurement, routine data that directly supports service delivery needs to come from cases reported to the police and social services. Good systems need to be in place to ensure that reporting is encouraged, and that cases are accurately recorded and maintained in local offices and properly compiled at provincial and national level. Reporting systems also need to move beyond a criminal justice approach of tracking cases and prosecution, and include the monitoring of social services to help children heal.¹³
- Good administrative data on the delivery of responsive child protection services and psychosocial support for children is needed. Government needs to track child protection cases that are brought before the court within 90 days (as

Box 9: Data on disability and developmental delays

As with many other components of early childhood development, data on disability and developmental delays do not fit neatly in a specific component. Rather, the Nurturing Care Framework emphasises the cross-cutting inclusion of children with disabilities and/or developmental delays across the five key components: good health, adequate nutrition, responsive caregiving, opportunities for early learning, and security and safety.

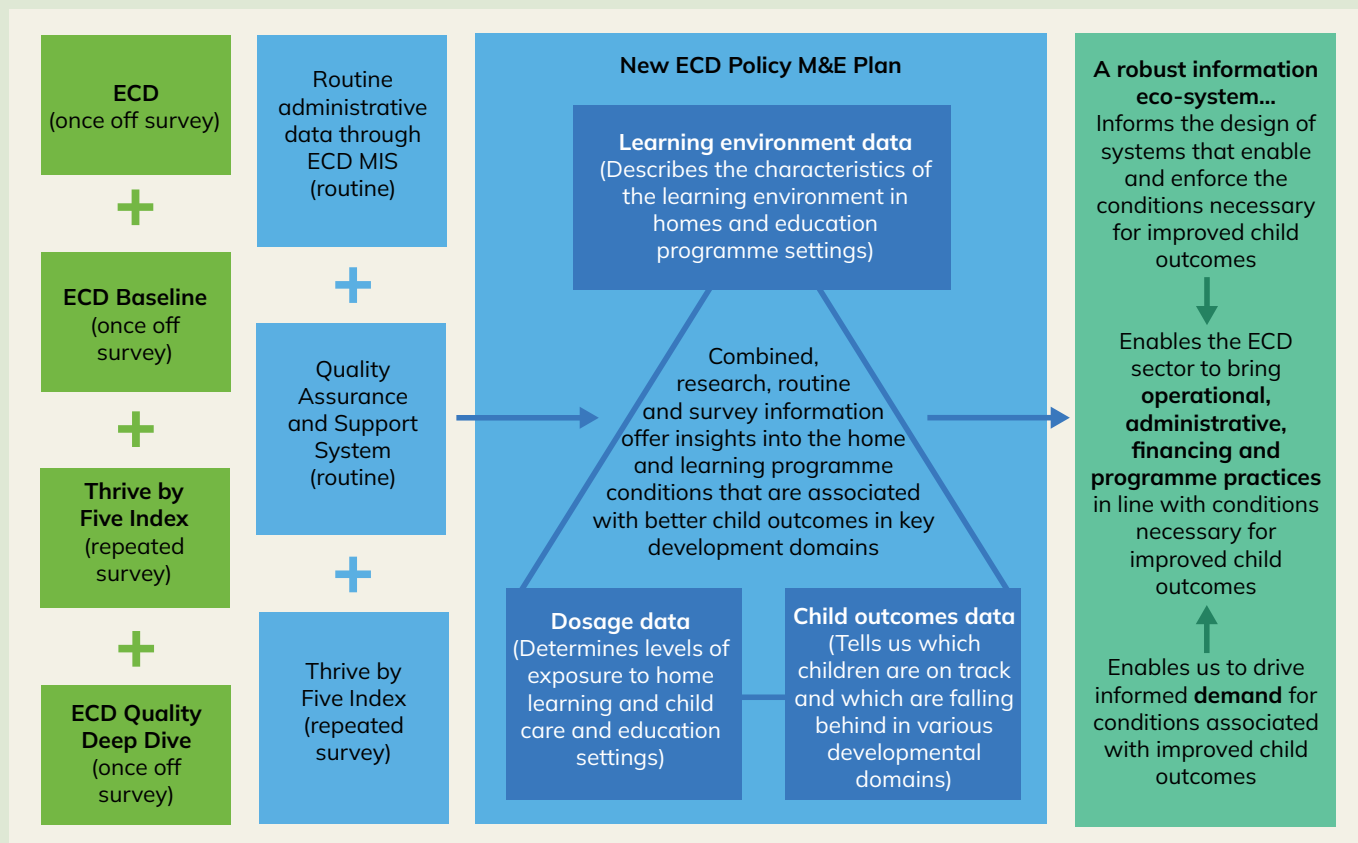
South Africa does not have a nationally accepted tool for measuring the prevalence of disability among young children. The last dedicated National Disability Prevalence Survey was conducted in 1999, and more recently, modules of disability questions have been included in the National Census, the Community Survey, and certain General Household Surveys. It is argued that existing measures cannot be used reliably to determine prevalence of child disability particularly in

children younger than five as evidenced by their exclusion from the analysis in key reports.^{viii}

The Road to Health Book includes a section that aims to help identify children at risk of disability and developmental delays but this data is not routinely collected in an administrative system and remains within the book itself. Another source of data on severe disability for children under the age of 18 can be drawn from the Care Dependency Grant administered by SASSA. Certain screening systems for identifying disability in school-age children have been introduced through the public education system in conjunction with the Department of Health, including assessments of hearing, speech and gross motor function. Similar efforts are yet to be rolled out to younger children in early learning programmes

viii Statistics South Africa. (2014). *Census 2011: Profile of persons with disabilities in South Africa. (Report no. 03-01-59)*. Pretoria: Stats SA. Department of Social Development (DSD), Department of Women, Children and People with Disabilities (DWCPD) and UNICEF. (2012). *Children with Disabilities in South Africa: A situation analysis: 2001-2011*. Pretoria: DSD/DWCPD/UNICEF.

Figure 28: Early learning information ecosystem



Adapted from: Giese S, Dawes A, Tredoux C, Mattes F, Bridgman G, van der Berg S, ... Kotzé J. *Thrive by Five Index Report Revised August 2022*. Cape Town: Innovation Edge. 2022. [www.thrivebyfive.co.za]

stipulated in the Children’s Act) by linking the administrative data systems of DSD and the Department of Justice and Constitutional Development.

Early childhood care and education information

South Africa does not yet have an implemented national administrative data system for early learning programmes that can collect aggregate programme and learner level data in the same way as the DBE’s SA-SAMS and LURITS systems. While government regularly reports on the number of registered and funded early learning programmes and children (nationally and provincially), the accuracy of this data is uncertain because data collection is paper-based and reporting done manually, without clear data standards and protocols in place. Administrative data through the paper-based system are also limited to registered early learning programmes that account for less than half of all early learning programmes.¹⁴ The number and proportion of children accessing early learning programmes at a population-level is generally drawn from the GHS. The *South African Child Gauge*, the *South African Early Childhood Review* and the *Statistics South Africa Education Series* are publications that use the GHS in this way.¹³

In order to address some of these data gaps, the government embarked on a series census-type surveys of the ECD sector in 2001, 2013 and 2021. The latest iteration of the ECD Census in 2021 identified 42,420 early learning programmes (see Box 10). On each occasion, the government has intended the survey to form the basis of a routine administrative information system for early learning programmes. An interim administrative system, known as the Registration Management Tool, was built for the Department of Social Development in 2021 and transferred to the DBE following the function shift. However, its use is not yet widespread and routine across all provinces. The end result is that government has not been able to take a population-based approach to the monitoring, planning and delivery of early learning programmes, or to overcome the challenges of paper-based data collection and manual reporting.

Since taking over the early childhood development function, the DBE has made significant efforts to build the early learning information ecosystem. There are a range of social partners supporting the DBE with these initiatives, enabling South Africa to respond to its international reporting obligations and improve its planning, service delivery and policy development domestically. Two major initiatives are worth highlighting:

Box 10: Major developments in the ECD information ecosystem¹⁶

Prior to 2021, key ECD publications such as the *Child Gauge* and the *South African Early Childhood Review* reported a dearth of data on early learning. The situation has improved with several new initiatives spearheaded by the DBE to address data gaps.

The ECD Census: The DBE commissioned an ECD Census to enable better oversight, support and resource allocation.¹⁴ It was the largest effort to date to map the early learning landscape in South Africa. The census sought to document every early learning programme (registered and unregistered) across the country. Data were collected between August 2021 and February 2022 and included information on location, operations, income sources, learning resources, registration status, child enrolments, staffing, teaching practices and infrastructure at 42,420 sites nationally. Around 1.6 million children were enrolled at the surveyed sites, with a lower number of 1.1 million in attendance on the day of the survey.

The Thrive by Five Index: Building on the development of the Early Learning Outcomes Measure (ELOM) by DataDrive2030, the Thrive by Five Index¹⁷ is the first in a series of population-based surveys planned to take place every three years. The Index will monitor the proportion of children aged 50 – 59 months who are on track for their age in three key areas of development: early learning, physical growth and socio-emotional functioning. Between

September and November 2021, the index assessed $\pm 5,100$ children between the ages of 50 – 59 months, enrolled in 1,247 early learning programmes across nine provinces. A shortcoming of the Index was that it only assessed children enrolled in early learning programmes, and the next round in 2024 will include non-enrolled children.

The Early Learning Programme Baseline Assessment:¹⁸ The baseline assessment was undertaken alongside the Thrive by Five Index. Principal and practitioner interviews were conducted in 545 of the 1,247 early learning programmes that participated in Thrive by Five. Trained assessors also observed and rated the quality of the learning environment and practitioner-child interactions in each of these sites.

The ECD Deep Dive Study: DBE and The LEGO Foundation initiated the Deep Dive Study¹⁹ to complement the ECD Census and Thrive by Five Index and enhance understanding of how early learning programmes were implementing the curriculum. The mixed methods study included significant qualitative and observational work in 50 early learning programmes and seven more in-depth case studies, and examined the implementation of the National Curriculum Framework, play-based learning, the inclusion of children with disabilities, parent engagement, and the services supporting early learning programmes to deliver quality programming.

1) the Thrive by Five Index; and 2) the Early Childhood Administration and Reporting Systems (eCares)

The introduction of the Thrive by Five Index, by the DBE and DataDrive2030, represents a significant step forward in terms of assessing population-level outcomes at the end of the preschool phase to assess school preparedness among other critical developmental outcomes (see Box 10). The Early Learning Outcomes Measure (ELOM)¹⁵ used in the Thrive by Five Index also enables South Africa to report on Sustainable Development Goal 4.2, defined as the proportion of children under five years of age who are developmentally on track in health, learning and psychosocial well-being, by sex.

Unfortunately, the findings from the Thrive by Five Index have not yet been included in the South Africa ECD Country Profile despite South Africa having developed a local validated

measure officially accepted by the DBE. The likely reason for this exclusion is because the ELOM measure is not directly comparable to the UNICEF-led Early Childhood Development Index 2030 (ECDI2030)^{viii} which has been recommended globally as the tool to measure developmental outcomes among young children for the purposes of SDG monitoring and reporting.

Neither the ELOM nor the ECDI2030 were designed to measure development outcomes for children under three years old. To fill this gap, the World Health Organization launched the Global Scales for Early Development (GSED) in 2023 to provide an internationally validated tool to assess young children during this critical period of development. It is unclear whether the GSED will be adopted by South Africa.

The second major initiative led by the DBE and their social partners is the design and roll out of the Early Childhood

viii The ECDI2030 captures the achievement of key developmental milestones by children between the ages 24 – 59 months. The module can be integrated into existing national data collection efforts (such as the DHS) and can be disaggregated by key demographics and subnational areas.

Administration and Reporting System (eCares). eCares, a partnership between the DBE and Ilifa Labantwana, and funded by the Lego Foundation, is being designed to collect routine information on: the registration status of early learning programmes; child enrolment and attendance; funding; human resources; infrastructure needs; and programme quality. The eCares initiative, to be rolled out from 2024 to 2027, will address one of the most important gaps in the early learning information landscape, by establishing an administrative data system to support population-based planning and accountability.

Where to from here?

South Africa is capable of meeting its domestic and international reporting requirements for early childhood development, particularly when guided by the priority indicators of the Nurturing Care Framework. This chapter has outlined various shortcomings in the current ECD information ecosystem. It has also highlighted several promising initiatives between the government and social partners to address data gaps. It has shown areas where better information can lead to improved service quality, and those areas that increase South Africa's ability to properly plan, resource, monitor and scale its efforts to reach the goals set out in the National Development Plan and the NIECD Policy.

To build on these efforts, we argue for the following five priorities:

- Develop an ECD Outcomes Framework to unify the various strands of data on early childhood development. The ECD Outcomes Framework should inform the next Medium-Term Strategic Framework. The government should also accelerate plans to publish a clear and pragmatic monitoring and evaluation framework for the NIECD Policy. One outcome of a new monitoring and evaluation framework could be an 'ECD Dashboard' like that used in the Nurturing Care Framework Country Profiles but tailored to South Africa's specific needs and context. The dashboard, which would include the priority set of indicators known to be drivers of child development outcomes from across the essential package, would enable assessment of the implementation of the Policy and would support leadership and coordination in the relevant government structures at national and provincial levels. If the dashboard was publicly accessible, it could also be used by civil society, communities and caregivers themselves to hold government accountable as they are

the most invested in ensuring that their children receive the best start in life.

- Establish the Thrive by Five Index as a routine outcomes survey conducted every three years to assess progress towards improving quality of early learning programmes with sufficient time between surveys to make improvements to service delivery and to measure whether these improvements are effective. The Index should be elevated to a priority indicator in the Medium-Term Strategic Framework.
- Accelerate the build and roll-out of the Early Childhood Administration and Reporting System (eCares) and the transition from paper record keeping to a digital architecture. While there are very real digital gaps at the population-level, connectivity and access to digital tools should not be an impediment for government officials and their workplaces. The development of eCares should be accompanied by a change management approach wherein relevant government officials are supported to make the shift from paper to digital, and financial resources are invested in the tools of trade to enable these officials to adopt new digital administrative and quality assurance processes.
- Leverage existing data collection efforts and systems to improve information on disability, early learning, nutrition and the home learning environment. In the case of data on disability, the Child Functioning Module could be used at population level to provide a proxy indicator of disability amongst children aged 2 – 4 years. In addition, the GHS questions on home stimulation should be reintroduced by Stats SA to regularly monitor and track improvements in the home learning environment.
- Work towards child-level data collection using unique identifiers and to improve integration and interoperability between the various government administration systems to allow for tracking children across services and over time.

Prioritising these five areas will substantially strengthen ECD data systems in South Africa. By transitioning to a digital early learning management information system, conducting regular population-level child assessments, improving what data is collected on children, standardising the ways in which data is collected, and tracking children across services – South Africa will lay a foundation for making measurable progress to achieve its early childhood development ambitions.

References

1. Office of the High Commissioner of Human Rights. *Convention on the Rights of the Child*, UN General Assembly Resolution 44/25. Geneva:

United Nations. 1989.

2. United Nations General Assembly. *Convention on the Rights of Persons*

- with Disabilities, A/RES/61/106, Annex I, 13 December 2006. Geneva: UN. 2006.
3. United Nations General Assembly. *Transforming our World: The 2030 Agenda for Sustainable Development. Resolution adopted by the General Assembly on 25 September 2015*. New York: United Nations. 2015.
 4. African Union. *Agenda 2063. The Africa We Want. Framework Document*. Addis Ababa: AU. Available from: https://au.int/sites/default/files/documents/33126-doc-framework_document_book.pdf.
 5. Casale D. Recovery from stunting in early childhood and subsequent schooling outcomes: Evidence from NIDS Waves 1–5. *Development Southern Africa*. 2020, 37:483–500.
 6. Shisana O, Labadarios D, Rehle T, Simbayi L, Zuma K, Dhansay A, . . . SANHANES-1 Team. *South African National Health and Nutrition Examination Survey (SANHANES-1)*. Cape Town: HSRC Press; 2013.
 7. National Department of Health, Statistics South Africa, South African Medical Research Council, ICF. *South Africa Demographic and Health Survey 2016*. Pretoria, South Africa, and Rockville, Maryland, USA: NDoH, Stats SA, SAMRC, and ICF. 2019.
 8. Simelane T, Mutanga SS, Hongoro C, Parker W, Mjimba V, Zuma K, . . . Marinda E. *National Food and Nutrition Security Survey: National Report*. Pretoria: Human Sciences Research Council. 2023.
 9. Giese S, Dawes A, Tredoux C, Mattes F, Bridgman G, van der Berg S, . . . Kotzé J. *Thrive by Five Index Report. Revised August 2022*. Cape Town: Innovation Edge. 2022. [Accessed August 2022: www.thrivebyfive.co.za]
 10. Hall K, Sambu W, Almeleh C, Mabaso K, Giese S, Proudlock P. *South African Early Childhood Review 2019*. Cape Town: Children's Institute, University of Cape Town and Ilifa Labantwana. 2019.
 11. UNICEF South Africa, Department of Basic Education. *Scoping Study to Determine Priority Geographical Areas for Face-to-face training and Capacity Development of Parents with Children Aged Birth to Six Years*. Pretoria. 2023. [Accessed 28 June 2024: <https://www.unicef.org/southafrica/documents/brief-scoping-study-determine-priority-geographical-areas-face-face-training-and-capacity>]
 12. Statistics South Africa. *Child Series Volume I Children exposed to maltreatment, 2021*. Pretoria: Stats SA. 2021.
 13. Jamieson L, Sambu W, Mathews S. *Out of harm's way? Tracking child abuse cases through the child protection system in five selected sites in South Africa*. Cape Town: Children's Institute, University of Cape Town. 2017.
 14. Department of Basic Education. *ECD Census 2021: Report*. Pretoria: DBE. 2022.
 15. Snelling M, Dawes A, Biersteker L, Girdwood E, Tredoux CG. The development of a South African Early Learning Outcomes Measure: A South African instrument for measuring early learning program outcomes. *Child: Care, Health and Development*. 2019, 45:257–270.
 16. Hall K, Almeleh C, Giese S, Mphaphuli E, Slemming W, Mathys R, . . . Sadan M. *South African Early Childhood Review 2024*. Cape Town: Children's Institute, University of Cape Town and Ilifa Labantwana. 2024.
 17. Giese S, Dawes A, Tredoux C, Mattes F, Bridgman G, van der Berg S, . . . Kotzé J. *Thrive by Five Index Report Revised August 2022*. Cape Town: Innovation Edge. 2022. www.thrivebyfive.co.za
 18. Department of Basic Education. *Baseline Assessment, Technical Report*. Pretoria: DBE. 2022.
 19. Biersteker L, Kvalsvig J, Zastrau E, Carnegie T. *LEGO Deep Dive*. Pretoria: Department of Basic Education. 2023.