Towards measuring outcomes related to responsive caregiving: opportunities for early learning and child development (birth to three)

Note: It is acknowledged that caregiving needs to be understood within the context of a particular cultural community and in many South African households, it is not limited to mother-child dyads or biological parents: it also includes grandparents, siblings, and other adults. It is also acknowledged that responsive care and support for early learning will take different forms in different cultural contexts, but that these differences are not necessarily reflected in dominant research. Our particular focus in this discussion paper is on early language development (birth to three years), and how this is supported by the way in which caregivers respond as well as the early learning opportunities they provide.

Background

In December 2025, Cabinet approved the National Strategy to Accelerate Action for Children (NSAAC) following extensive consultation with the children's sector, government departments and children themselves.[1] It identifies ten priorities to improve the conditions and the development of our nation's children and adolescents. While South Africa has made significant progress in strengthening early childhood development (ECD), delivering measurable improvements in foundational development, the full impact of its efforts will not be realised unless support is strengthened for earlier development in the first three years of life. Thus the NSAAC's Priority 1 seeks to "Strengthen families and enable parents & caregivers to care for their children" and Priority 5 aims to "Grow children's brainpower through early learning and language development".[2] Delivering at scale requires financing, collaboration and strengthening a network of caregiver support and monitoring that contributes to a common set of outcomes, building on existing platforms and standards.[3] Through an agreement between the Presidency and the DG Murray Trust, the Hold My Hand Accelerator for Children and Teens has been established to fast-track the design and development of some of the key interventions that are most in need of public-private collaboration, such as supporting responsive caregiving and language development for very young children.

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[1] *Our children hold the power to change our future*. 2025. Pretoria: The Presidency. Available at: https://www.thepresidency.gov.za/node/9627 (Accessed 17 December 2025).

[2] Accelerating action for children and teens in South Africa. 2025. *Hold My Hand brochure*. Cape Town: Department of Social Development; The Presidency; Hold My Hand. Available at: https://holdmyhand.org.za

[3] Birth to Three: Investing early in lifelong development. Building a coordinated system of responsive caregiving and early learning for South Africa's youngest children. 2026. Hold My Hand Policy Brief 06. Cape Town: Hold My Hand. Available at: https://holdmyhand.org.za

To track progress towards these goals, Hold My Hand partnered with DataDrive2030 to explore indicators and measures related to early learning (birth to three years). DataDrive2030 exists to bridge the gap between data and action in South Africa's early learning ecosystem. Central to this is the organisation's function as an enabler of data systems across various actors in the sector. Through standardising tools, assessor training, and data infrastructure, and while ensuring contextual relevance and open access where appropriate, DataDrive2030 works to enable the sharing, comparison and use of data across contexts.[4] This positions DataDrive2030 not as a standalone actor, but as an enabling platform within a broader ecosystem — supporting actors at different levels to move from data to insight, and from insight to action. This is illustrated by the sector-wide uptake of the Early Learning Outcomes Measure (ELOM) for 4–5-year-olds, which demonstrates the catalytic role that common, reliable, locally standardised, valid, and cross-culturally fair assessment tools can play by anchoring measurement in a shared framework.[5]

In August 2025, a workshop was convened around measurement of early learning from birth to the age of three years. Participants from various sectors noted that without common indicators, standardised data collection systems, and shared measures of caregiver–child interaction and child development, it's difficult to track programme reach and quality, compare outcomes, identify promising practices or evaluate overall effectiveness. The lack of evidence hinders advocacy efforts, and this work remains invisible and under-resourced.

The workshop report recommended concrete next steps including: a situational analysis of the birth to three measurement landscape; a brief highlighting the gaps in data and the implications of this to create demand; a list of tools to measure birth to three child outcomes; a national repository of tools; a central, standardised indicator reference sheet and guide; and an investigation of how established global tools have been used effectively, and how elements of these may translate into South Africa's needs and context. This discussion paper serves to address some of these gaps and recommendations.

Introduction

Decades of research show that responsive caregiving and early learning opportunities are critical factors that influence child development, especially for children exposed to early adversity.[6] Infants who receive sensitive and responsive caregiving are more likely to go on to have better social functioning and relationships with peers, and enhanced school performance.[7] Caregiver responsiveness explains some of the variability in child language development,[8] [9] predicts vocabulary growth, and is associated with stronger language comprehension. Together, responsiveness and early learning opportunities create the

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[4] Giese, S., Dawes, A., Biersteker, L., Girdwood, E. and Henry, J. 2023. Using data tools and systems to drive change in early childhood education for disadvantaged children in South Africa. *Children*, 10(9): 1470. Available at: https://www.mdpi.com/2227-9067/10/9/1470

[5] Snelling, M., Dawes, A., Biersteker, L., Girdwood, E. and Tredoux, C. 2019. 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*, 45(2): 257–270. Available at: https://onlinelibrary.wiley.com/doi/10.1111/cch.12641

[6] Trude, A.C.B., Richter, L.M., Behrman, J.R., Stein, A.D., Menezes, A.M.B., Black, M.M. and Pelotas & Birth to Twenty Plus Investigators. 2021. Effects of responsive caregiving and learning opportunities during pre-school ages on the association of early adversities and adolescent human capital: An analysis of birth cohorts in two middle-income countries. *The Lancet Child & Adolescent Health*, 5(1): 37–46. Available at: https://doi.org/10.1016/S2352-4642(20)30309-6

[7] Tomlinson, M. 2013. Caring for the caregiver: A framework for support. In: Berry, L., Biersteker, L., Dawes, A. and Lake, L. (eds). *South African Child Gauge 2013*. Cape Town: Children's Institute, University of Cape Town, pp. 56–61.

[8] Tamis-LeMonda, C. S., Bornstein, M. H., & Baumwell, L. 2001. Maternal Responsiveness and Children's Achievement of Language Milestones. Child Development, 72 (3), 748-767.

[9] Bornstein, M.H., Putnick, D.L., Bohr, Y., Abdelmaseh, M., Lee, C.Y. and Esposito, G. 2020. Maternal sensitivity and language in infancy each promotes child core language skill in preschool. *Early Childhood Research Quarterly*, 51: 483–489.

relational and experiential foundation that drives healthy brain development, early language acquisition, and lifelong learning trajectories.[10]

Responsive caregiving is a multi-dimensional set of behaviours through which caregivers notice, interpret, and respond to their babies' cues. Responsive caregiving behaviours may differ across cultures and contexts, and may include:

- the caregiver's warmth, sensitivity and encouragement during interactions,
- attentive observation,
- prompt responses to an infant's signals (sounds, gestures, facial expressions, or actions),
- building on what a baby is already interested in,
- non-verbal and relational practices such as close physical proximity, gestures, shared daily tasks, storytelling and song,
- the amount and quality of language babies hear from caregivers.

Early Learning Opportunities refer to the everyday chances that infants and young children have to explore, interact, play, and communicate in ways that help them make sense of the world. According to the Nurturing Care Framework, early learning happens through warm, playful interactions with caregivers, and can be embedded in ordinary moments and daily chores and routines.

In South Africa, many families face risks associated with poverty and exposure to violence.[11] It is the duty of the state to reduce these risks, create a more enabling environment, and provide support to caregivers. Government policies in South Africa acknowledge the need for a range of supports, and parenting support is a component of several national policies including the National Integrated Early Childhood Development Policy, the National Child Care and Protection Policy, the Maternal, Neonatal, Child Health and Nutrition Policy, and the Integrated Crime and Violence Prevention Strategy. Parents with the youngest children are recognised as a priority target group.

Despite policy commitments, there is still a significant gap in the provision of services that support caregivers to create opportunities for early learning and development, and a need to expand and strengthen existing service platforms. At community level, the Department of Health (DoH) runs programmes that incorporate elements of ECD. Community health workers (CHWs), as well as HIV support programmes, also integrate aspects of parent support into their work. Providing adequate, culturally relevant support to caregivers to enable nurturing care requires proper resourcing and coordinated action across multiple government departments and programme partners, often non-governmental organisations (NGOs). Support must be both caregiver-informed – grounded in caregivers' lived realities – and evidence-informed, so that resources are directed towards interventions that are proven to work. Generating this evidence, in turn, depends on using appropriate measures to assess effectiveness.

The purpose of measurement

Measurement of caregiver responsiveness, provision of early learning opportunities and child development can be used to guide policy choices that can improve young children's lives by identifying service gaps, informing targeting, supporting cost-effectiveness analysis, and strengthening the evidence base for scaling or redesigning interventions. Robust data enables policymakers to move from commitments to actionable, accountable plans. DataDrive2030's work on the ELOM suite of tools and the Thrive by Five Index demonstrates how developing practical tools and generating accessible early learning data can inform decision-making and shape practice across a range of stakeholders, including NGOs,

[10] Melhuish, E.C., Phan, M.B., Sylva, K., Sammons, P., Siraj-Blatchford, I. and Taggart, B. 2008. Effects of the home learning environment and preschool center experience upon literacy and numeracy development in early primary school. *Journal of Social Issues*, 64(1): 95–114. Available at: https://doi.org/10.1111/j.1540-4560.2008.00550.x

[11] World Health Organization. 2009. Preventing violence through the development of safe, stable and nurturing relationships between children and their parents and caregivers. Geneva: World Health Organization. Available at: http://apps.who.int/iris/bitstream/10665/44088/1/9789241597821_eng.pdf

researchers, evaluators, funders and government. Shared measurement tools and benchmarks support adaptive programme improvement, comparative programme effectiveness analysis, and population-level accountability, enabling coordinated action across the system.

In the birth to three age group, measures are needed for:

1) **Population monitoring** to evaluate and monitor progress towards national policy commitments or international standards such as the Tashkent Declaration and Commitments to Action for Transforming Early Childhood Care and Education.[12]
2) **Determining programme effectiveness**. Measures can be used to evaluate whether programmes are effective (lead to significant improvements for the beneficiaries) and explore the proximal factors (the immediate conditions) that support early development and learning.[13] For example: how does improved caregiver mental health (through counselling, peer support groups, or psychosocial support) relate to children being 'on track'?
3) **Improving programme implementation**. At programme level, when all children are assessed and found to be struggling in specific areas of development, practitioners can use this information to adjust their strategies and provide targeted support. Measures of the caregiving environment that enable child learning and development can also highlight where programme interventions need to be strengthened or refined – for example, by supporting caregiver–child interactions or increasing access to appropriate learning materials.

Beyond tracking progress towards national policy goals for universal access to early learning and parenting support (as set out in the National Integrated ECD Policy), and strengthening implementation and programme effectiveness, measurement serves two additional purposes:

4) **Screening of individual children** to determine if their development is on track, or whether they need extra support or referral to specialist services. Screening conducted by health professionals, practitioners or implementers of caregiver and child programmes can alert caregivers and programme staff to potential gaps or delays in specific areas of development. This information can then be used to identify children who may need targeted remedial support or referral to additional services. In screening, the focus is on the individual child.
5) **Assessment for the purposes of creating awareness and providing feedback and support**. Measures can also be used to provide feedback to caregivers about their children's development. An example is Mazi Umtanakho ('know your child'), developed for children aged three and over. This digital tool, based on the Strengths and Difficulties Questionnaire, assesses the social emotional development and mental health of young children in South Africa. It includes feedback on assessment results and resources for caregivers. The authors note that: 'It appears that the tool increased home visitors and caregivers' knowledge, which sparked self-awareness amongst home visitors and caregivers; they reflected on their responses and behaviours, and the potential impact of these on the children in their care. This suggests the ability of assessment tools – developed and delivered in contextually relevant ways – to impact on self-perceptions and behaviours, which could be powerful catalysts for positive change in these settings.'[14]

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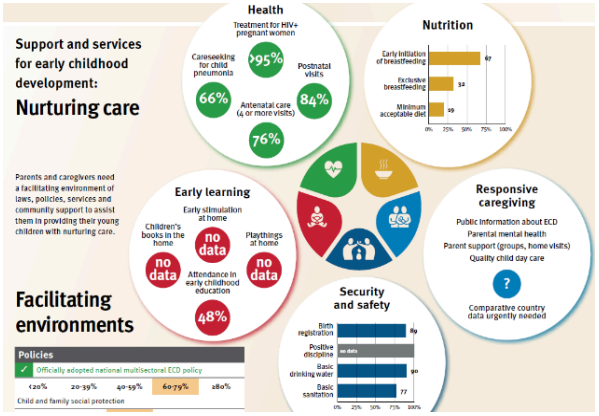
[12] UNESCO. 2022. *Declaration and commitments to action for transforming early childhood care and education*. 16 November 2022. Paris: UNESCO. Available at: https://www.unesco.org/sites/default/files/medias/fichiers/2022/11/tashkent-declaration-ecce-2022.pdf

[13] In the case of using a measure to determine programme effectiveness, the performance of children in the programme would need to be compared with a control group of the same age and background who did not go through the programme.

[14] Draper, C.E., Cook, C.J., Ankrah, E.A., Beltran, J.A., Cibrian, F.L., Lakes, K.D., Mofid, H., Williams, L. and Hayes, G.R. 2025. Feasibility and acceptability of the *Mazi Umntanakho* digital tool in South African settings: A qualitative evaluation. *Infant and Child Development*, 34: e2567. Available at: https://doi.org/10.1002/icd.2567

Data landscape at a national level (population monitoring)

South Africa is one of many countries that does not collect population monitoring data on responsive caregiving and early learning in the home from birth to three years. This gap reflects a lack of investment in government programmes for these elements of the Nurturing Care Framework. In the Countdown to 2030 Country profiles[15] data is available for South Africa for enrolment in early childhood education, but there are data gaps for other **early learning** indicators (early stimulation at home, playthings at home, children's books in the home) and suggested indicators for **responsive caregiving** (public education about ECD, caregiver mental health, caregiver support, quality child daycare).[16] These indicators have not been institutionalised in the birth to three programme package for either the DoH or the Department of Basic Education (DBE).[17]



These data gaps are not unique to South Africa. International reviews of measurement tools and indicators used to assess nurturing care in ECD show a strong emphasis on health and nutrition, with comparatively less attention given to early learning, responsive caregiving, and safety and security.[18]

The Responsive Caregiving and Early Learning Indicators that inform the 2030 Country Profiles include the following suggested indicator related to Responsive Caregiving: Parent support through groups and home visits.[19] In South Africa, despite a recent scoping study[20] of parenting support programmes, the reach of caregiver support programmes from birth to three years is as yet unknown.[21] Government has recognised this gap, and the DBE's ECD 2030 strategy includes plans to work with the DoH and the Department of Social Development (DSD) to develop a comprehensive picture of existing parent support programmes (understanding the footprint, reach and strengths of existing parent support programmes and improving data collection, monitoring and evaluation of parent support programmes).

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[15] Countdown to 2030. n.d. *Data*. Available at: https://www.countdown2030.org/about/data

[16] World Health Organization, UNICEF and World Bank Group. n.d. *Nurturing Care country profiles*. Available at: https://nurturing-care.org/resources/country-profiles/
World Health Organization, UNICEF and World Bank Group. 2023. *Early Childhood Development Countdown to 2030: Appendix*. Available at: https://nurturing-care.org/wp-content/uploads/2023/10/ECD_Countdown2030_Appendix.pdf

[17] The General Household Survey 2016 was the last time any data on home early stimulation was collected and it was not disaggregated by age.

[18] Jeong, J., Bliznashka, L., Sullivan, E., Hentschel, E., Jeon, Y. et al. 2023. Measurement tools and indicators for assessing nurturing care for early childhood development: A scoping review. *PLOS Global Public Health*, 3(5): e0001906. Available at: https://doi.org/10.1371/journal.pgph.0001906

[19] Parent support through groups and home visits is defined as follows in the 2030 Country Profiles: 'Support, either through parent groups or home visits, is of assistance to parents in receiving reassurance, the companionship of others with shared challenges, information about their baby's development and parent and family behaviors and responses that support infant development, demonstrations of how they can approach and resolve difficulties, and referral to additional services should they need them'.

[20] Davies, N., Lomofsky, D., Chikwanda, M. and Budlender, D. 2023. Brief on 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: UNICEF and Department of Basic Education. Available at: www.southernhemisphere.co.za (Accessed 21 August 2024).

[21] Department of Basic Education (DBE). 2023. South Africa's 2030 strategy for early childhood development programmes: Every child matters. Pretoria: Department of Basic Education.

The South African Early Childhood Review[22] synthesises publicly available ECD data and its chapter on **Stimulation for Early Learning** notes: "*The home environment is critical in early learning, particularly in the first two years of life. In these earliest years, support to parents and other caregivers is essential to strengthen care and learning in the home, especially amongst vulnerable households" (p. 55).* Readers are referred to the chapter on **Support for Primary Caregivers**, which does not include any data on support for caregivers to provide early learning opportunities.

Although there have recently been several key initiatives to increase the use and availability of early childhood data in South Africa,[23] and measurement tools developed for this purpose,[24] these initiatives do not include caregiver support programmes, or data about early learning in homes. For children from birth to three years, available data focuses largely on access to early learning programmes. The draft Quality Assurance and Support System (QASS) classroom observation tool includes classes with children from age two. However, the Monitoring and Evaluation Framework for the National Integrated ECD Policy, currently under development, does not yet include indicators or measures related to caregiver support and early learning for children from birth to three. Although the National Early Learning Development Standards (NELDS)[25] outline developmental milestones for birth to four years, the document is only available in English and is used to guide programme design rather than being used directly by practitioners or caregivers.[26] Within the Health sector, the Road to Health Booklet (RtHB) includes a focus on Love, Play, Talk (Pillar 2) and screening questions. These screening questions are used for caregiver feedback and referrals, but there are no system-wide indicators to track related outcomes.

Data landscape at a programme level (implementation monitoring)

In the recent Parent Policy Benchmarking Assessment Report on progress towards the provision of universal parenting support in South Africa,[27] the authors note that 'the absence of consistent data collection tools and indicators across various decentralised programmes makes it difficult to assess reach, compare outcomes or aggregate data. This limitation reduces the ability to identify promising practices, learn from various interventions, and develop evidence-based policies. Many NGOs and programme implementers lack the resources, training, and technical expertise needed to conduct rigorous monitoring, evaluation and learning (MEL). This gap prevents high-quality data collection and hinders the ability to translate findings into actionable insights that can improve programme delivery and demonstrate effectiveness' (p.36). Recommendations from this report include 'developing standardised data collection tools and indicators while ensuring investment in strengthening capacity for routine data collection and analysis' (p.7).

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[22] Hall, K., Almeleh, C., Giese, S., Mphaphuli, E., Slemming, W., Mathys, R., Droomer, L., Proudlock, P., Kotze, J. and Sadan, M. 2024. *South African Early Childhood Review 2024*. Cape Town: Children's Institute, University of Cape Town and Ilifa Labantwana. Available at: http://www.childrencount.uct.ac.za/uploads/publications/SA-ECR_2024.pdf

[23] The ECD census; the Thrive by Five Index; the ECD Baseline Audit; the development of an ECD Monitoring and Evaluation (M&E) Framework; national Early Childhood Administration and Reporting System (eCares); the National Reading Barometer (https://www.readingbarometersa.org/)

[24] Learning Programme Quality Assessment (LPQA) and Quality Assurance and Support System (QASS) assess the quality of early learning programmes and the ELOM suite of tools enables tracking child development outcomes at 4-5.

[25] Department of Basic Education. 2009. *National early learning and development standards for children: Birth to four years (NELDS).* Pretoria: Department of Basic Education.

[26] The National Early Learning and Development Standards (NELDS) set out expected developmental outcomes by age band (0–18 months, 18–36 months and 3–4 years). Although NELDS is not itself a measurement tool, it can inform the development of measures across the domains of communication; physical, motor and health; cognition; social and emotional functioning; and mathematical concepts, with standards and illustrative examples for each.

[27] Department of Social Development. 2025. *Parenting support policy benchmarking assessment report: Pilot assessment tool for benchmarking policy provision for universal parenting support in South Africa*. Pretoria: Department of Social Development. Available at: https://www.unicef.org/southafrica/media/11851/file/ZAF-UNICEF-parenting-policy-benchmarking-2025.pdf

A 2025 survey of 27[28] organisations revealed that caregiver support is generally tracked through programme-specific tools and paper-based registers, or digital spreadsheets. The growth in the development of data management tools, information and reporting systems, tools and apps to track access to and quality of centre-based early learning programmes[29] is not yet reflected in the tools used to monitor the provision of support to caregivers at home. Although some NGOs have developed tools aligned with their programme offerings,[30] the development, validation, adaptation and translation or versioning of tools within a resource-constrained environment is challenging and costly. Very few organisations have tools linked to broader monitoring and evaluation (M&E) systems, and organisations generally use self-developed tools to track caregiver reports on changes in knowledge, attitudes and practices related to responsive care and early learning. Caregiver behaviour is usually self-reported, and child development is rarely measured directly.[31]

Existing measures

Because developing and validating new measures is costly, it is often preferable to adapt existing instruments. However, this requires careful consideration of their underlying assumptions and whether they are appropriate in different cultural contexts. Although comprehensive guidelines and lists of measures are used internationally,[32] in this paper we attempted to narrow the focus to those measures that were developed for, or could be adapted to, the South African context.

Most of the measures referred to in this discussion paper can be used without a professional qualification, while some do require professional oversight. Potential users include researchers, programme delivery agents (including professionals and trained paraprofessionals like community workers, mentor mothers, home visitors, CHWs, and ECD practitioners), parents and other primary caregivers.

The tables that follow provide an overview of measures that focus on responsive caregiving, early learning opportunities, the home learning environment, child development (birth to three years), as well as a measure of caregiver wellbeing.

The measures have different purposes and many require adaptation for contextual and cultural relevance. Contextual and cultural sensitivity requires:[33]

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[28] https://www.holdmyhand.org.za/early-learning-survey

[29] Example: DG Murray Trust (DGMT). n.d. *Learning brief: Building buzzing brains*. Available at: https://dgmt.co.za/learning-brief-building-buzzing-brains/

[30] Mikhulu Trust. n.d. *ABQ assessment for parents*. Available at: https://mikhulutrust.org/resources/for-facilitators/templates/abq-assessment-for-parents/

[31] Apart from the Ages and Stages Questionnaire and tools used by health professionals, most organisations used self-developed tools that rely on caregiver or teacher feedback.

[32] World Bank Group. 2023. *Measuring child development and early learning (English): Early Learning Partnership guidance note*. Washington, D.C.: World Bank Group. Available at: http://documents.worldbank.org/curated/en/099005303182235389

Jeong, J., Bliznashka, L., Sullivan, E., Hentschel, E., Jeon, Y., Strong, K.L. et al. 2022. Measurement tools and indicators for assessing nurturing care for early childhood development: A scoping review. *PLOS Global Public Health*, 2(4): e0000373. Available at: https://doi.org/10.1371/journal.pgph.0000373

Institute for Child Success. n.d. *ECMeasures: Measures for early childhood*. Available at: https://ecmeasures.instituteforchildsuccess.org/measures

Institute for Child Success. n.d. *Impact Measures Tool*. Available at: https://www.instituteforchildsuccess.org/our-initiatives/initiative/impact-measures-tool/

[33] These points were raised by participants at a workshop held in Cape Town on 19 August 2025.

- Moving beyond child outcomes and shifting focus from “children” alone to “children and caregivers”; and measuring caregiver inputs, environments, and enabling conditions rather than child development milestones only.
- A decolonised approach to measurement that acknowledges cultural diversity in caregiving practices. It respects South African and broader African caregiving traditions, rather than relying solely on Western-centric norms and developmental standards.
- Ensuring that measures recognise diverse modes of interaction, community caregiving networks, and the socio-economic realities of families in low- to middle-income countries (LMICs).
- Involving communities in defining what responsiveness looks like within their cultural context and designing interventions that build on local caregiving strengths rather than importing models developed elsewhere.
- Alignment with the South African National Curriculum Framework.
- Considering the roles of multiple caregivers rather than only focusing on the mother-child dyad.
- Considering how language structure and language development differ across languages; simply translating measures of language development will not be accurate or appropriate.
- Recognising the limited funding available to NGOs and the heavy burden already carried by frontline workers, particularly community health workers. Any measurement system should avoid adding unnecessary data collection responsibilities and, wherever possible, integrate with existing tools to prevent overburdening staff.
- Centring parents and caregivers as co-creators and users of measurement tools, not merely subjects of data collection (e.g. mixed methods and qualitative research to better understand how tools align with local caregiving practices, providing caregivers with access to information about children’s development).
- Ensuring that data collection returns tangible benefits to children and families, rather than being extractive.
- Ensuring that tools measure enablers (supportive environments, positive intergenerational practices), not only risks and deficits.
- Adapting tools to ensure contextual relevance (e.g. inclusion of local examples of toys).
- Awareness that the impact of programmes on caregiver behaviours and caregiver-child interaction may not be apparent when total scores include scales that ‘count’ materials (e.g. books, toys).
- Recognising that cut-points (thresholds/passing scores) can differ substantially from the original development site and need to be established for the local context.
- Taking account of the limitations of tools in different contexts. For example, there is evidence that Likert-type (multiple choice) tools are poorly understood in many settings.

The measures listed in Table 1 can be used to assess children's development across domains. They generally include caregiver reports and/or guidelines for direct observation (and suggestions for toys or books to be used for the observation task). These measures may also have short and long forms.[34]

Table 1. Selected measures of child development to be used at a population level and/or as measures of programme effects[35]

Child development – population measures of child development & measures of programme effects									
Measure	**Domains covered**	**Use**	**Potential users**	**Age range**	**Measure direct / parental report**	**Administration time**	**Training requirement**	**Ability requirements for administration**	**Copyright/ Cost Cultural adaptations**
Global Scales for Early Development (GSED)	Motor, Language, Cognition, Social – Emotional Adaptive Total Standardised D Score	Population measure of child development Programme effects	Government Researchers Programme staff	0–3 years (in three-month bands)	Short form (SF) Parent/caregiver report Long Form (LF) direct assessment	SF 139 items 30–50 per age band LF 155 items 45–60 per age band	SF - On line or in person training 2–3 days Practical and theory LF - 5–7 days online and in person Practical and theory	SF Secondary education, training and experience interviewing parents. LF Certification of competence Survey CTO App version or paper	Free https://www.who.int/publications/i/item/WHO-MSD-GSED-package-v1.0-2023.1 Validation in LMICs Versioned in isiXhosa for research purposes.
Caregiver Reported Early Development Index (CREDI)	Motor, language, cognition, social-emotional, mental health	Population measure of child development Programme effects	Government Researchers Programme staff	0–35 months	Parent/caregiver report	Five minutes short form 15 minutes long form	Short training and practice	Basic reading and comprehension	Free https://credi.gse.harvard.edu/materials Has been used across multiple LMICs

[34] Short-form child development assessments offer quick overviews for population screening, while long forms provide detailed, domain-specific scores for in-depth evaluation, often taking longer but revealing more nuanced progress across developmental areas.

[35] Adapted and expanded from Biersteker, L. 2017. *Selecting a child development monitoring tool: Technical guidance note*. USAID Contract No. AID-OAA-C-14-00067; Evaluation Assignment Number: 382

Child development – population measures of child development & measures of programme effects									
Measure	**Domains covered**	**Use**	**Potential users**	**Age range**	**Measure direct / parental report**	**Administration time**	**Training requirement**	**Ability requirements for administration**	**Copyright/ Cost Cultural adaptations**
Developmental Milestones Checklist 11 (DMC)	Gross motor, fine motor, language, problem solving, personal social	Screen Programme effects	Researchers Programme Staff	3–24 months	Caregiver report and direct administration	Varies depending on age of child 15–20 minutes	Minimal (online videos available) Helpful drawings	Basic reading and comprehension	Free Developed in Kenya and validated in other African countries
Malawi Development Test (MDAT)	Gross motor, fine motor, language, social	Screen Programme effects	Researchers Programme Staff	0–6 years	Direct assessment instrument	136 items Approx. 35 minutes	Substantial training	Ability to observe and supervision by a psychologist User friendly picture aids for administration	Free https://mdat.org.uk/ Created for use in African settings
Kilifi Development Inventory (KDI)	Psychomotor including hand eye co-ordination	Screen Programme effects	Researchers Programme Staff	6–35 months	Direct assessment instrument	30 minutes to one hour	Training manual – up to 2-week familiarisation with materials	Ability to observe and supervision by a psychologist	Free Reliability and validity established for a rural African setting
SA Communicative Development Inventories (SA-CDIs)	Language development and communication skills Comprehension, production (words, sentences), use of gestures, and emerging grammar.	Population measure of communicative development, programme effects. Tracks typical development, helps identify potential language delays; data for research.	Professionals Researchers Parents (via an app)	8– 30 months Infant questions for 8–18 months; toddler questions for 16–30 months	Parent/caregiver report Development of a digital tool for parents in pilot phase.	Long form: 45 minutes Short form: 25 minutes	There is no training programme beyond professional expertise.	Professionals administering the MB-CDI in clinical or research settings should have qualifications and expertise to interpret the results. Parents will be able to use it online or via an app or with the help of a professional.	Free https://sa-cdi.org/cdi-progress/ Long form questionnaires for all SA languages. Short forms to be developed for quick assessment. Concurrent validation complete for 8 languages; norming in process

Child development – population measures of child development & measures of programme effects									
Measure	**Domains covered**	**Use**	**Potential users**	**Age range**	**Measure direct / parental report**	**Administration time**	**Training requirement**	**Ability requirements for administration**	**Copyright/ Cost Cultural adaptations**
									for isiXhosa, isiZulu and Afrikaans.
Early Childhood Development Index (ECDI 2030)	Learning Psychosocial wellbeing Health	Population measure part included in MICS 7 Early Childhood Module	Government Research	2–6 years Recommended cut scores 24, 30 and 36 months	Caregiver interview for survey	20 items covering three domains and 12 subdomains	Interviewers should have practical training on the guidelines specific to the ECDI2030 as well as general interviewing techniques. If Computer-Assisted Personal Interviews (CAPI) are used this will be additional training.	Experience with community interviews. Basic reading and comprehension	Free https://data.unicef.org/resources/early-childhood-development-index-2030-ecdi2030/ English

The screening tools listed in Table 2 are short measures for individual child measurement which provide a quick assessment of red flags for delay or disability. These can be used to trigger referral for professional assessment. Some of them include competency areas that will not be established until children are approximately 2 years and cannot be used for younger children.

Table 2. Selected screening tools

Child development – screening tools									
Measure	**Domains covered**	**Use**	**Potential users**	**Age range**	**Measure direct / parental report**	**Administration time**	**Training requirement**	**Ability requirements for administration**	**Copyright / Cost Cultural and language adaptations**
Road to Health Booklet – Love, Play, Talk Developmental Checklist	Hearing/ communication Vision and adaptive, Cognitive behaviour, Motor skills	Simple screen to identify red flags; referral guide for health workers	Health workers, primary caregivers ECD practitioners	14 weeks to 6 years	Observation, parent report	Four items per age group Five minutes	Not specified	Basic reading and comprehension	Free https://sidebyside.co.za/resources/road-to-health-book/ Developed for SA context
Ten Question Screen	Delays/difficulties Mobility Vision Hearing Understanding Communication Fits, stiffness	Developmental disability screening Useful screen not suitable for assessing progress	Health workers ECD programme staff	2–9 years	Parent/caregiver report	Five minutes 10 items	Short familiarity training and practice, manual available	Basic reading and comprehension	Free http://disabilitymeasures.org/tenquestions/TQ_MICS3_Child_Disablity_Module_English_2013-04-14.pdf
Washington Group /UNICEF_Child_Functioning_Module_of the MICS_	Delays/difficulties Mobility Dexterity Vision Hearing Understanding Communication Learning Play Behaviour	Population estimate of proportion of children functional difficulties (rates level of functional difficulty)	Population level data Programme staff	2–4 years	Interview with knowledgeable respondent/caregiver	Five minutes 16 items	Training 2–3 hours including interview practice Training manual for interviewers https://data.unicef.org/resources/module-on-child-functioning-manual-for-interviewers/	Basic reading and comprehension	Free https://www.washingtongroup-disability.com/question-sets/wg-unicef-child-functioning-module-cfm/

Child development – screening tools									
Measure	**Domains covered**	**Use**	**Potential users**	**Age range**	**Measure direct / parental report**	**Administration time**	**Training requirement**	**Ability requirements for administration**	**Copyright / Cost Cultural and language adaptations**
Ages and Stages Questionnaire (SA standardisation)	Communication, gross motor, fine motor, problem solving, personal and social	Screen primarily Used in research	Researchers Programme Staff Parents	0–66 months	Parent/caregiver report. Can be combined with direct administration	25–30 items 10–15 minutes report, longer if direct administration	One-day training and practice DVD training package	Basic reading and comprehension	Costs: https://agesandstages.com/ Versioned in isiZulu. Feasibility study conducted in South Africa and Zambia

This table includes measures of the home learning environment (resources, activities) as reported by the caregiver, as well as observations of interaction between a caregiver and young child. They often include suggestions for toys or books to be used for observations.

Table 3. Selected measures of the home learning environment and caregiver-child interaction for potential use in South Africa

Home Learning Environment/Caregiver-child interaction/Responsive Care									
Measure	**Domains covered**	**Use**	**Potential users**	**Age range**	**Measure direct / parental report**	**Administration time**	**Training requirement**	**Ability requirements for administration**	**Copyright / Cost Cultural and language adaptations**
UNICEF MICS Version 6 -Children under 5 Module	Supervision Learning resources Play activities Discipline Functioning	Population measure	Government Research	0–4 years	Caregiver interview for survey	15 items 10 minutes	Familiarise with items	Experience with community interviews. Basic reading and comprehension	Free https://mics.unicef.org/tools https://mics.unicef.org/tools?round=53#survey-design

Home Learning Environment/Caregiver-child interaction/Responsive Care									
Measure	**Domains covered**	**Use**	**Potential users**	**Age range**	**Measure direct / parental report**	**Administration time**	**Training requirement**	**Ability requirements for administration**	**Copyright / Cost Cultural and language adaptations**
Observation of Mother Child Interaction (OMCI)	Main caregivers: Affect Language Stimulation Child Affect, Focus Communication	Programme effects	Researchers Programme Staff	0–3 years	Observe and code	5-minute observation frequency rating of different indicators Coding	Training to establish reliability	Culturally responsive observer (examples of indicators need to be contextually appropriate)	Free Developed for use in rural Pakistan has been used in several SSA countries.
Home Learning Environment (DataDrive2030)	Opportunities for Early Learning: Learning Resources Learning Activities in the home Time with the Child	Population programme effects	Researchers Programme staff	2–7 years	Caregiver Interview	20 items 20–25-minute interview	An online orientation course is available and takes approximately 45 minutes to complete	Interviewing experience	Download the pdf version of the tool for free OR apply to access the digital tool. See ELOM User Journey and Pricing Packages Developed in SA; All official languages
Bradley HOME Infant and Toddler Version	I. Responsivity: II. Acceptance: III. Organization: IV. Learning Materials V. Involvement: VI. Variety:	Programme effects	Researchers Programme Staff	0–2 years	Interview and observation	45 items 45–90 min	Training practical to establish reliability	Observers need to be culturally responsive, familiar with working with families.	Free. HOME modified for LMIC has been used in Bangladesh, Pakistan, Uganda, Ethiopia, Rwanda, Kenya. Would require contextual examples of household play materials. Version for 3–6-year-olds has been used in SA.

Home Learning Environment/Caregiver-child interaction/Responsive Care									
Measure	**Domains covered**	**Use**	**Potential users**	**Age range**	**Measure direct / parental report**	**Administration time**	**Training requirement**	**Ability requirements for administration**	**Copyright / Cost Cultural and language adaptations**
Parenting Interactions with Children: Checklist of Observations Linked to Outcomes (PICCOLO)	Affection Responsiveness Encouragement Teaching	Programme needs assessment, monitoring and effectiveness	Programme staff Researchers	0–3 years	Observation (can be videoed and scored later)	29 items One hour	1–2 days of training.	DVD available to practice scoring.	PICCOLO was developed for Early Head Start; a copyrighted measure that and requires purchase, with materials (from $15–$150) English and Spanish only.
Care for Child Development Counselling Checklist	Responsivity to the child – for infants physical only, older communication and then play support	Screening of caregiver interaction	Health Workers Programme Staff	0–3 years	Observation	A few minutes	Familiarisation		Free https://www.unicef.org/lac/en/media/8571/file/Counseling%20Cards%20-%20Long%20version.pdf
Parent Play Questionnaire	Frequency Types of Play Attitudes about Play	Research Programme effects	ECD practitioners Researchers Programme Staff	Three months to three years	Parent interview	15 items	NA	Standardised tool	Free

Home Learning Environment/Caregiver-child interaction/Responsive Care									
Measure	**Domains covered**	**Use**	**Potential users**	**Age range**	**Measure direct / parental report**	**Administration time**	**Training requirement**	**Ability requirements for administration**	**Copyright / Cost Cultural and language adaptations**
Nurturing Care Framework Responsive Care and Early Learning Tools	Caregiver Responsive Behaviour Positive Affect Verbal and Non Verbal Responsive Nonresponsive Stimulation Caregiver Initiated Affect Caregiver Initiated Action Early learning	To inform programme implementation Basis for caregiver counselling	Programme staff		Observation of caregiver and child playing with age-appropriate toy for responsivity Parent interview for Early Learning	Responsivity frequency coded for period of 10 min Early Learning Yes No verified by seeing resource or detailed description.	Guidance on indicators with examples and suggestions in document	Would need training in frequency observation and coding for IRR	Free https://nurturing-care.org/wp-content/uploads/2021/03/Proposed_indicators.pdf#:~Annex (plus table of descriptors) Age-appropriate play object required for observation.
Engage 0–2	Caregiver Child Interaction Support for Exploration Support for Agency Support for Emotional Climate	Programme monitoring or evaluation, research	Programme staff Researchers	0–2 years	Caregiver-child dyad observation tool Caregiver survey tool.	Observation 15 items 15 minutes plus coding time Survey: Demographics 30 items re interactions in last week and 13 re: overall frequency	Five days Including background to constructs, scoring of videos and interviewing practice and field application	Required level of interrater reliability	Free https://learningthroughplay.com/measuring-learning-through-play/playful-learning-across-the-years-engage

Home Learning Environment/Caregiver-child interaction/Responsive Care									
Measure	**Domains covered**	**Use**	**Potential users**	**Age range**	**Measure direct / parental report**	**Administration time**	**Training requirement**	**Ability requirements for administration**	**Copyright / Cost Cultural and language adaptations**
Responsive Interactions for Learning (RIFL)	Communicative Clarity, Mind-Reading Mutuality Language	Programme effects Programme planning	Programme staff, researchers	6 months to 3 years for young child task	Observe and rate	5 min A dyad are given an age appropriate task as a sample of caregiver interaction to be rated on 11 items	6–8 hours online coding training (free)		Free https://rifl.ca/AssessmentTool.html Developed in Canada Adapted and established equivalence in Brazil

As the wellbeing of caregivers is vital for responsive caregiving, we have included a measure of caregiver wellbeing.

Caregiver Wellbeing									
Measure	**Domains covered**	**Use**	**Potential users**	**Age range**	**Measure direct / parental report**	**Administration time**	**Training requirement**	**Ability requirements for administration**	**Copyright / Cost Cultural and language adaptations**
Brief Cape	Positive coping	Caregiver wellbeing and coping in adverse circumstances	Researchers Programme staff	Caregivers of all ages	Interview	Nine items 10–15 minutes	Familiarise with items	Local language speaker, good interviewing technique	Free

Additional measures

Caregiver-child interaction in group settings

Although only a small proportion of babies and toddlers are in group care, South African studies have noted the generally poor quality of baby care programmes.[36,37] Given the potentially harmful effects associated with inadequate daycare for very young children, this is a critical area for ongoing monitoring. Currently, the draft Quality Assurance and Assessment Framework (QASS) only measures quality of provision for children from two years of age. Some of the measures focusing on caregiver-child interaction (Table 3) have an equivalent form for assessing teacher-child interactions (e.g. Responsive Interactions for Learning (RIFL)).[38] There are also classroom observation tools that are designed to measure the quality of early years group settings that cater for children aged three and under. The Infant and Toddler Environmental Rating Scale (Third Edition),[39] is an observational tool used to assess the quality of care environments across several domains. In our context, the most relevant domains include space and furnishings; language and books; activities; interaction; and programme structure. The tool can be used by programme staff and researchers to assess quality systems. It is a classroom observation measure that takes approximately four hours to administer

Monitoring quality of programme inputs and programme delivery

Several measures are designed to monitor programme delivery and ensure that key messages are conveyed sensitively and appropriately. The IECD (Nurturing Care Framework) Monitoring Provider for Responsiveness tool,[40] for example, provides indicators of both weak and strong service provider support to caregivers. These cover: watching the caregiver interact with the child, giving feedback, demonstrating responsive behaviours, and guiding delivery of the intervention by the caregiver. These indicators are a useful basis for a programme delivery monitoring tool for caregiver support programmes, and could be adapted for use with group parenting support programmes. The indicators would need to be formatted as a rating scale with an appropriate scoring system. The Home Visit Rating Scales (HOVRS)[41] is another measure of the quality of home visits targeting babies and young children. It is an observation tool that includes ratings of relationship building, responsiveness, and family engagement (primary caregivers and children).

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Recommendations for action

The following recommendations emerged from the research undertaken for this discussion paper, as well as from the 2025 workshop convened with academics and NGOs to explore the measurement of early learning from birth to three years. We hope that these actions will be part of a collaborative effort to work towards measures and measurement systems for birth to three years that are contextually relevant, caregiver-inclusive, and system-linked, with a strong emphasis on ethical use, collaboration, and policy relevance.

- Make a case for investing in birth to three measures and data systems to track and aggregate the reach of caregiver support programmes, compare the effectiveness of interventions and better understand the mediators of learning and development, and to influence policy and unlock funding.

- Identify the user base: publish a list of organisations and individuals working in the birth to three age group and share examples of good practice and case studies to inspire and validate investment in measures.

- Build consensus on 'high impact' proxy indicators related to caregiver well-being and support that are highly correlated with, or mediate, child outcomes, and explore the relationships between these indicators.

- Build and strengthen partnerships between academia and grassroots organisations for collaboratively designed mixed-method research projects. Qualitative methods are important for studying cultural differences in responsive caregiving behaviours across different contexts.

- Prioritise the birth to three age group in national surveys and data collection:
    - Design a comprehensive ECD module for inclusion in national surveys, with specific questions for birth to three years.
    - Include questions focused on birth to three years in the next National Reading Survey (the previous survey included questions on oral storytelling, and this could be extended to include more questions on culturally relevant practices that support early development).

- Build on existing DoH and DBE initiatives:
    - Strengthen Pillar 2 (*Love, Play, Talk*) of the RtHB by identifying indicators linked to responsive caregiving and opportunities for early learning that can be tracked within the national health system.
    - Expand the use of screening items in the RtHB and strengthen systems for providing feedback to caregivers, linking them to practical activities that address caregiving challenges, developmental delays and clear referral pathways.
    - Review and make accessible the work previously initiated to develop a formative assessment system linked to the NCF.[42]

[42] In 2018 DBE and UNICEF commissioned the development of an early learning and development assessment tool based on the National Curriculum Framework for Children Birth to Four Years and associated materials for reporting back to parents and training. It was piloted on a small scale in two provinces but has never been made available.

    - Develop a dedicated module within the Quality Assurance and Support System (QASS) that focuses on the quality of early learning programmes for babies and toddlers.
    - Include caregiver support indicators in the M&E Framework for the National Integrated ECD Policy and integrate parenting programme data in eCares.
- Reach consensus on, and adopt, a set of common child outcome measures for children from birth to three years. These should be complemented by culturally appropriate tools to monitor caregiver responsiveness and the quality of early learning environments in both home and group settings:
    - At **population** level, the GSED is preferred because it builds on many of the generic developmental outcome measures presented in Table 1 and allows for international comparability. DataDrive2030 has already explored its potential use in South Africa and could provide support with assessor training, data infrastructure and reporting. To meet copyright requirements, policy and government partners would need to engage with the World Health Organization (WHO) to support a negotiated agreement on local use of the GSED.
    - Many tools that measure **how caregivers respond to children with sensitivity and promote early learning** reflect a particular cultural framing. As a way forward, NCF indicators could be used as the basis for a South African measure with sector collaboration to generate a range of examples of observable behaviour drawn from different cultural and socio-economic contexts.
    - The currently preferred **disability screen** proposed by disability sector specialists is the Child Functioning Module of the MICS.
    - The IECD rating of **parent support facilitator competencies** can be adapted to inform effective parent support interventions.

- Invest in measures:
    - Adapt measures to be contextually appropriate and translate or version them into South African languages.
    - Create a platform/knowledge hub where measures that are adapted, piloted and used locally can be accessed and shared.
    - Develop assessor training and quality assurance processes, data infrastructure and reporting tools to support the adoption of measures by NGOs.
    - Explore and pilot mechanisms for providing feedback to caregivers on child outcomes and linking feedback to appropriate resources.

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