

NAIROBI EARLY CHILDHOOD DEVELOPMENT PROGRAMME INITIATIVE

## A BASELINE STUDY ON THE STATE OF EARLY CHILDHOOD DEVELOPMENT IN NAIROBI

**POLICY BRIEF** 



### **INTRODUCTION AND CONTEXT**

The Nairobi City County Government has embarked on an ambitious effort to make Nairobi a city of dignity, hope and opportunity for all. In line with this vision, the County team has set out a transformative goal of ensuring that 95% of children under six years are developmentally on-track in health, learning and social-emotional well-being by 2030.

With a commitment to deliver an integrated, multisectoral Early Childhood Development (ECD) programme, the County leadership aspires to leverage existing systems to deliver strategic interventions that would ensure all children in Nairobi develop to their optimal potential. To inform the programme design, the Aga Khan University's Institute for Human Development was commissioned to conduct a baseline study on the state of ECD in Nairobi. The evidence from the baseline study would provide insights into the key demand and supply-side drivers that impact children's developmental outcomes; inform the design of key strategic interventions to be prioritised for implementation; establish systems that monitor the implementation, progress, and outcomes of a multisectoral ECD initiative, guide how the initiative will be implemented in Nairobi and provide the evidence base to judiciously deploy resources needed for the children of Nairobi to have the best start in life.

Investing in early years has been proven to be the single most effective method for societies to break out of poverty and vulnerability cycles, address inequality, boost productivity and equip the younger generation with the skills they need for the future. In Kenya, the potential for reaping demographic dividends is huge. The country has a population of 56.4 million people¹ with nearly 46% under 18 years of age. Kenya's capital city, Nairobi, has a population of 5.5 million with approximately 750,000 children estimated to be under five years of age. As a rapidly expanding city, child health and access to early learning opportunities has improved, but much remains to be done in order to ensure equitable and inclusive access for children from vulnerable households. The rapid urbanisation,

demographic changes, and population growth in the city have led to increased demand for ECD services<sup>2</sup>. Diverse socioeconomic backgrounds and varying levels of access to resources across different neighbourhoods complicates effective implementation of ECD programmes<sup>3</sup>.

The prioritisation of the early childhood development programme by the County Government and the commitment to place young children and their families at the centre of development planning in Nairobi is momentous. Recognising that early childhood development falls under the mandate of county governments, its prioritisation in Nairobi has the potential to set the benchmark and influence the national scale up of ECD in Kenya.



 $<sup>1. \</sup>underline{https://census2021.statsghana.gov.gh/gssmain/fileUpload/pressrelease/2021\%20PHC\%20Provisional\%20Results\%20Press\%20Release.pdf (access date 28 January 2022) and the access date 28 January 2022 and the acc$ 

<sup>2</sup> Beyer, Chaudhuri, & Kagima 2016

<sup>3</sup> Oloo et al, 2023

### **STUDY DESIGN**

The baseline study adopted a cross-sectional evaluation design using both quantitative and qualitative approaches to assess: the proportion of children under six years of age developmentally on and off track according to international standards; the types of Early Childhood Development (ECD) interventions that children under six years are accessing; and the key supply-side drivers of children not meeting their developmental milestones. Overall, 2,903 households of children under three years, and 1,057 children aged 4-6 years in ECDE Centres were surveyed. Across the 17 sub-counties, 178 caregivers and stakeholders were interviewed, supplemented by 18 expert interviews providing critical contextual insights. Key measures assessed included child development indicators, school readiness, nutritional status, caregiving practices, and policy frameworks.

#### The key research questions included

#### **OBJECTIVE 1**

Child outcomes



**OBJECTIVE 2** 

Household outcomes



**OBJECTIVE 3** 

ECD services - situational analysis



**OBJECTIVE 4** 

ECD structural and policy analysis

- What are the developmental outcomes of children aged 0-3 years in Nairobi?
- What is the status of school readiness for children aged 4-6 years in Nairobi?
- What are the caregivers' KAPs and behaviours in relation to child development and learning?

Quantitative analysis

- How is the nurturing care and the early stimulation practices among parents in Nairobi?
- What are the responsive social protection and child safeguarding practices in Nairobi?
- How do the nurturing care promotion strategies apply to parenting in Nairobi?

Qualitative + Quantitative analysis

- What are the existing ECD services delivered in Nairobi?
- Who are the primary ECD providers in Nairobi?
- What is the coverage and quality of ECD services delivered in Nairobi, based on NCF for ECD?
- What is the status of access and utilisation of ECD services in Nairobi?

Document +
Quantitative
analysis

- What are the existing ECD policies and regulations at county and national levels in Kenya?
- What is the impact of ECD policies and regulations on ECD programming?
- How are the ECD interventions coordinated in Nairobi county?

Systematic review + Qualitative analysis

# KEY FINDINGS AND TAKEAWAYS FROM THE BASELINE STUDY

#### 3.1 CHILD DEVELOPMENTAL OUTCOMES

# About 1 in 6 (16.3%) children aged 0-3 years are developmentally off-track, three times higher when compared to an international sample of peers.

This means that the prevalence of developmental delays (being off-track) is 11 percentage points higher in Nairobi compared to the global trends.

Approximately 80% of brain development occurs within the first three years of life. The high prevalence of children experiencing developmental delays highlights the need for targeted interventions.

Cognitive domain reported the highest proportion of children who were off-track. Specifically, 16.3% were off-track in cognitive development, 14.5% were off-track in socio-emotional development, 12.9% were off-track in motor development, and 12.4% were off-track in language development.

# 7 out of 10 children living in informal settlements are at a higher risk of not achieving their developmental potential.

The prevalence of overall child developmental delay (off-track) was largely influenced by settlement type – formal versus informal – with children living in informal settlements at a higher risk of not achieving their developmental potential. This is evidenced by the fact that 69% of all children reporting developmental delays in the study were living in informal settlements in Nairobi. However, the proportion of children who were developmentally off-track overall did not differ significantly by gender or household wealth.

Figure 1: The percentage of children off track per domain



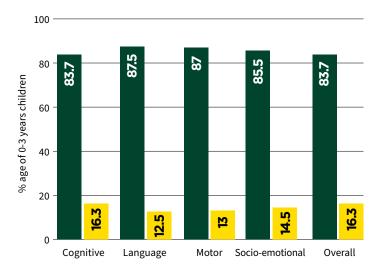
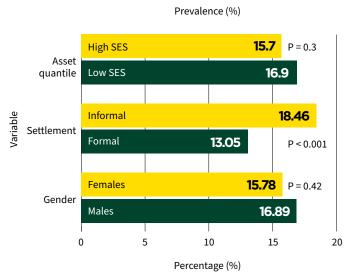


Figure 2: The prevalence of overall child developmental delay (off-track) by child gender, settlement and household wealth



P-values are based on the chi-squared test

### Age, nutritional status (underweight), presence of a child living with disability in a household, type of settlement, paternal involvement, household food insecurity status, and home environment status were associated with the overall child development score.

Results from the multivariable linear regression model suggested that increasing age, paternal involvement, and home environment were associated with a higher overall child development score. Children from informal settlements (relative to formal settlements), those from households with a child living with disability, and those who were underweight (relative to those not underweight) had lower overall child development scores.

#### Approximately 1 in 5 children aged 0-3 years in Nairobi were stunted, while one in ten children were underweight.

The nutritional status of young children in Nairobi is concerning as just over one in five (22.0%) children aged 0-3 years were stunted and one in ten (10.0%) children under three years are underweight. Despite this high prevalence of malnutrition, only one in five (23%) parents reported receiving nutritional support or services. There were no significant differences by settlement type or household wealth quantum, with boys exhibiting significantly higher rates of malnutrition than girls.

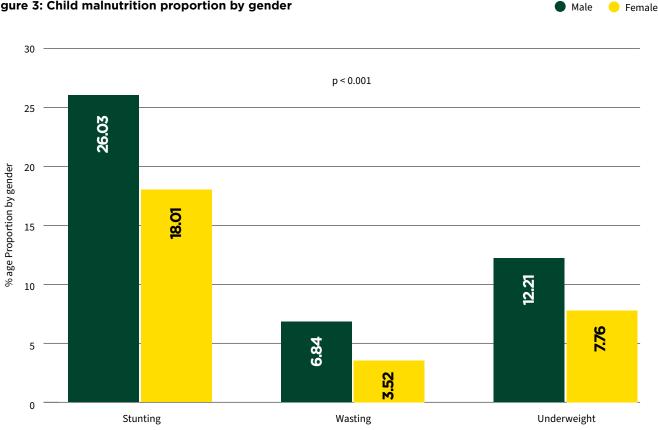


Figure 3: Child malnutrition proportion by gender

### Gender and birthweight emerged as significant predictors of stunting, wasting and being underweight with males and low birth weight children at a higher risk.

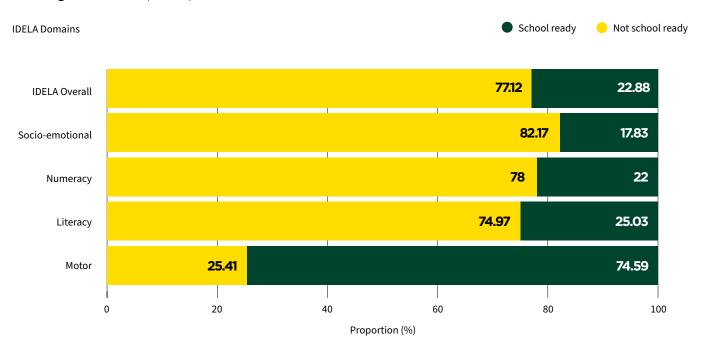
A child being hospitalised and having a sibling with a disability also increased the risk of wasting and underweight. Low birth weight significantly increased the odds of a child being stunted and underweight by four times. However, pregnancy problems, caregiver's age, education, marital status, mental health status, household size, asset index, settlement type, paternal involvement, home environment score, food insecurity score, and whether a household shared a toilet with neighbours, were not significantly associated with undernutrition.

#### 3.2 SCHOOL READINESS OUTCOMES OF CHILDREN

#### Three-quarters (77%) of children aged 5-6 years assessed in the study were not school ready.

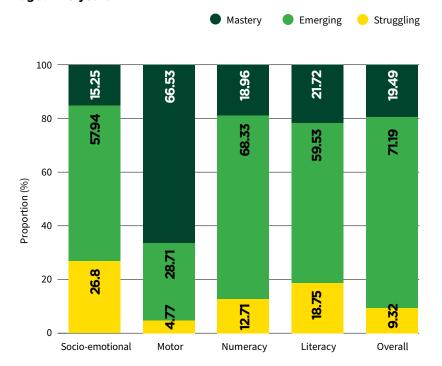
This implies that the children had not sufficiently gained mastery at the end of the pre-primary academic year. It was insightful to note that a greater percentage (73%) of children assessed to be not school ready demonstrated emerging competencies across all domains meaning they were meaningfully engaging with educational content although they had not mastered it fully. These findings flag the importance of intensifying efforts to ensure young learners in Nairobi are adequately prepared as they transition to primary school, as is expected under Kenya's competency-based curriculum.

Figure 4: School readiness assessment for children aged 5-6 years using the International Development Early Learning Assessment (IDELA)



Based on domain level results, about 9.4% of the children struggled while 71.2% had emergent school readiness skills. Children struggled most in social-emotional learning where 26.8% were categorised as struggling compared with the domain with the best performance: motor, where only 4.7% were struggling.

Figure 5: School readiness outcomes by domains for all children aged 4-6 years.



## Gender, age, early learning opportunities at home, quality of the physical environment in the ECDE Centres and the number of years a child has attended an ECDE Centre are positively associated correlates of school readiness outcomes

A mixed-effects linear regression model examined the factors associated with school readiness in Nairobi. Our models indicated that female gender, age, early learning opportunities at home, quality of the physical environment in the ECDE (Early Childhood Development Education) centres and the number of years a child has attended an ECDE centre are positively associated with the IDELA scores.

#### 3.3 NURTURING CARE PRACTICES FOR CHILDREN UNDER SIX YEARS

### A greater proportion (82.6%) of parents reported not having access to parental coaching programmes that target responsive caregiving and early stimulation.

Only one in six (17.4%) parents surveyed indicated that they had access to parental coaching support programmes. However, a significant proportion of fathers actively engage their children in play (72.1%), communication (61.1%), offer emotional support (71.0%), and contribute to household expenses (79.5%).

### Most mothers (68.5%) find breastfeeding relatively easy during the first six months of life, however a significant number (31.5%) reported experiencing challenges.

A number of caregivers reported facing difficulties in offering a diverse diet to their children aged 0-3 years with almost half (48.5%) reporting challenges when introducing solid foods. High-quality nutrition is a key pillar of the Nurturing Care Framework since it contributes to optimal physical growth and development. Encouraging feeding practices such as using positive reinforcement (clapping hands, making funny faces) are common with 79.8% of parents using encouraging words, and 80.6% praising their children. One in five (22%) of caregivers reported using scolding or harsh words, and 23.7% use physical discipline during feeding.

With regards to water and sanitation, the survey revealed that challenges persist in accessing clean water for consumption (75.1%), using clean toilets (60.5%) and safe disposal of waste (74.6%).

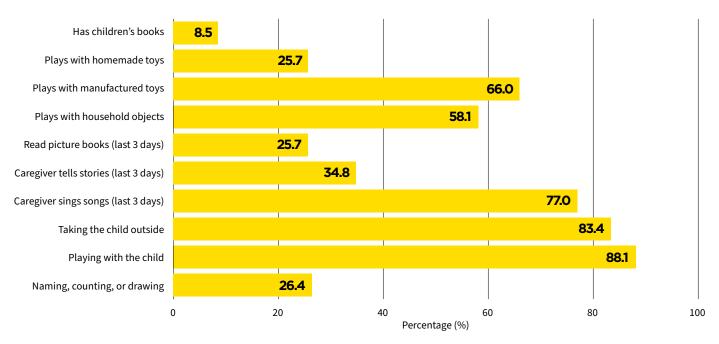
These findings highlight the need for improvements in access to WASH-related awareness-raising, resources and facilities.



### Parental engagement in stimulating activities related to early learning was far lower than their engagement with children on play activities.

Analysis of social-emotional stimulation in the home environment and caregiver practices revealed mixed results in how caregivers engage their children under three years in stimulating activities within households. A high proportion of caregivers engage in play activities (88.1%), sing songs to their children (77.0%), and engage in outdoor activities with their children (83.4%). There were however low levels of engagement in the areas of formal learning activities such as reading picture books (25.7%), storytelling (34.8%), and interactive activities like naming, counting, or drawing (26.4%).

Figure 6: Proportion of caregivers engaged in social-emotional stimulation activities
Early Childhood Development Activities Summary (N=2,903)



### 3.4 EMOTIONAL WELL-BEING OF CAREGIVERS OF CHILDREN 0-3 YEARS

It was concerning to observe that about one in seven (13.8%) caregivers presented with depressive symptoms and nearly one in ten (8.0%) presented with anxiety symptoms.

Caregiver mental health plays a crucial role in shaping child development. A caregivers emotional well-being significantly influences her interactions with her child, impacting their social, emotional, and cognitive development. Regression analysis showed that pregnancy complications, a child being hospitalised, and the presence of food insecurity in a household increased the chances of depressive symptoms with significant associations with caregivers' mental health. Child age, caregiver's age, education level, and whether the household had a child living with disability, were not significantly associated with caregiver mental health.

#### 3.5 ACCESS TO PLAYGROUNDS AND PLAY SPACES

#### Only one in ten parents (9.8%) of children aged 0-3 years reported having access to playgrounds.

Observational data indicated that availability of playgrounds is limited. In places where the spaces are available, they are either of poor quality, insecure, overtaken by informal and unregulated activities or not accessible to younger children. In a mapping exercise, 138 potential spaces were identified across the 17 sub-counties which could be used to create more play spaces. While many open spaces could be converted into play areas, disputes over ownership, land grabbing, and safety concerns could hinder their use. Clear land ownership, proper planning, and community involvement are essential to address these challenges and ensure sustainable play spaces. Community members overwhelmingly supported the idea of creating access to playgrounds for young children.

### 3.6 TYPES, ACCESS AND QUALITY OF ECD SERVICES

Within Nairobi, ECD services covering the nutrition and health sector, parenting support programmes, childcare services, early childhood special education, Early Childhood Development and Education (ECDE) centres, and pre-primary schools are provided by both the public and private sectors.

### From a 270-sample population, only 9.3% of children attended daycare, with an average starting at the age of 11 months and an average of 17 hours spent in daycare per week.

Respondents recognised daycare centres as valuable spaces for social interaction and where children can develop independence in basic self-care tasks. However, many respondents highlighted various challenges related to inadequate facilities with limited space, poor sanitation, and insufficient play areas.

### Children aged 4-6 years enrolled in pre-primary education centres demonstrated better school readiness outcomes.

Attendance at high quality ECDE centres has been associated with better educational performance, higher literacy and numeracy scores, and better social emotional development. The study examined the quality of ECDE Centres and found that 64% of APBET (Alternative Provision of Basic Education and Training) schools, 32% of private schools and 35% of public ECDE Centres had poor quality scores. The scores indicated a need for concerted efforts to enhance the quality of APBET schools which serve many children in Nairobi, especially those from low-income households.

### Children not enrolled in school were doing significantly worse than those attending school.

For instance, among children aged 5.5 years and older, 75% of those who were not attending ECDE centres were classified as "struggling" based on the IDELA assessment compared to 1.94% of those who attended ECDE centres.

# Observational assessments by the Nairobi Urban Planning team carried out in 59 ECDE centres in Nairobi revealed widespread issues including poor sanitation, inadequate drainage, and insufficient water and sewer systems.

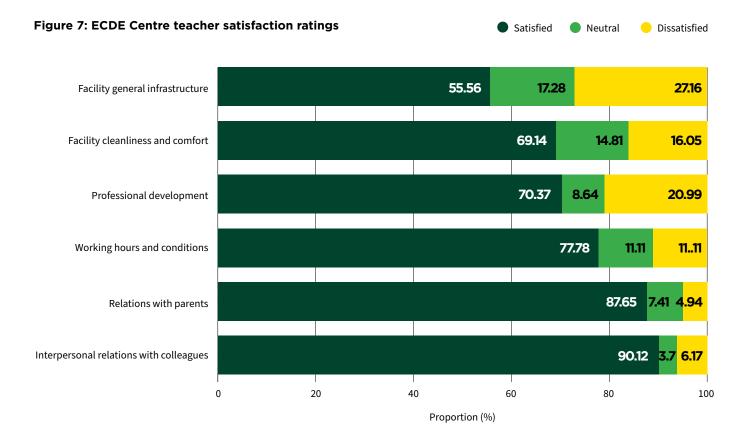
Many centres were overcrowded, lacked accessibility for children with disabilities, and faced security challenges such as vandalism and informal land encroachment. The design and layouts were often unsuitable for stimulating learning environments with limited play areas and contested spaces.



### 3.7 TEACHER EDUCATION, RENUMERATION, SUPERVISION AND SATISFACTION

More than half (56.2%) of the teachers in Early Childhood Development centres had qualifications below the minimum requirement, implying the teaching workforce in Nairobi's ECDEs would benefit from continuous professional development.

This problem was especially pronounced in public ECDEs where 88% of the teachers had a certificate-level qualification or less, portraying a less competent workforce. However, teachers surveyed reported relatively high levels of satisfaction with most aspects of their work, while the general learning infrastructure and opportunities for professional development ranked low.



#### 3.8 THE ECD POLICY LANDSCAPE

### Nairobi's ECD policy landscape strives for multisectoral collaboration but still experiences fragmentation.

Early Childhood Development (ECD) in Nairobi operates within a complex policy ecosystem. There is fragmentation in how organisations and sectors supporting childcare and ECD services operate, which may lead to duplication of resources and missed opportunities for a unified impact.

### **KEY POLICY RECOMMENDATIONS**

1

### Initiate and scale up integrated ECD interventions that promote nurturing care and stimulating environments for children and their caregivers

Children aged 0–3 years are three times more likely to be developmentally off-track as compared to an international sample of peers. In real terms, one in every six children in Nairobi are not reaching their developmental potential. To address this limitation, there is an urgent need initiate and scale up integrated interventions that promote nurturing care and stimulating environments for children and their caregivers. Prioritised interventions should address nutritional needs, access to social-emotional stimulation, economic support and empowerment and a creation of safe, nurturing homes and communities. Empowering caregivers (both females and males) to engage in key activities e.g. providing access to age-appropriate play materials, facilitating interactions with child-friendly books, and participating in activities like reading, storytelling, and playful exploration is one potential intervention. Our data indicates that nearly all pregnant women (98%) attend perinatal clinics (ANC), integrating social-emotional stimulating activities e.g. setting up child-friendly play areas within the ANC areas could be a powerful way to encourage this integration. Our results indicate that children living in informal settlements face the highest risk of developmental delays. This underscores the urgent need for targeted early interventions tailored to support these vulnerable children. Additionally, implementing routine developmental screenings in primary healthcare facilities is crucial for early identification and timely support for children who are developmentally off-track. Starting early during pregnancy can reduce the occurrence of risk factors such as low birth weight and stunting.

Prioritise access to adequate nutrition for children under three years of age, particularly those from socioeconomically vulnerable households

As evidenced in the study, one fifth of children are suffering from stunting. The city should therefore prioritise access to adequate nutrition for children under three years of age, particularly those from socioeconomically vulnerable households. This can be achieved through increasing the parental awareness on provision of nutritious and balanced meals, feeding practices, and the implementation of school meal programmes in daycare centres and pre-primary schools. The city should implement robust child growth monitoring promotion with a particular focus on children over two years of age who infrequently utilise local well-child clinics. This proactive approach will ensure timely identification, screening, and intervention for developmental delays and stunting.

Provide support and care for caregivers to enhance their capacity to provide nurturing care and improve their mental wellbeing

To support caregivers' mental health and parenting capacities, integrate mental health services into reproductive, maternal, newborn and child health programmes by providing screening, counselling, and referral pathways for those experiencing mental health challenges. Furthermore, there is a need to scale up parental counselling programmes through health facilities, community health promoters, and digital platforms to strengthen caregivers' capacity. Training community health promoters to deliver home-based parenting and nutrition counselling may further enhance support, while raising awareness to reduce stigma around mental health challenges and encourage caregivers to seek help.

Increase access to quality ECDE services leveraging both public and private service providers

Existing data revealed that there are only 228 public ECDE centres in Nairobi County, which is an inadequate number to meet the needs of the growing number of children within the county. As a result, a greater proportion of children are attending private and APBET schools. To improve children's school readiness, there is an urgent need to increase the number of ECDE centres to improve access to quality early learning services. Investing in accessible and free ECDE in Nairobi City County would promote this constitutional right and guarantee a skilled future workforce for Nairobi City County and beyond.

Build the capacity of the ECDE workforce to ensure adequate stimulation and play-based child-centred learning pedagogies among both public and private service providers
With the majority (88%) of ECDE teachers in public-funded schools having qualifications below the minimum requirement of diploma or university degree, there should be a focus on equipping ECDE centres with adequately qualified teachers.
This would involve upskilling and training the current teachers but also employing new, more qualified ECDE teachers.
The county government should develop a master plan to ensure adequate financial support, resources, and ongoing professional development opportunities for teachers within the ECDE space. To enhance school readiness and the quality of early childhood education, teachers should be trained to incorporate low-cost, locally available materials into

their teaching practices to promote stimulating and interactive learning experiences for children.

- Strengthen programmes that focus on comprehensive preschool curricula that emphasises emergent literacy and numeracy skills delivered through play-based child-centred learning pedagogies

  This approach fosters creativity and resourcefulness, while ensuring that all children have access to enriching learning opportunities. Empowering caregivers with resources and knowledge to support children's learning at home is equally critical. Strategies should be developed to improve the quality of education and infrastructure in APBET schools, which serve a significant portion of children in underserved areas. Partnerships with APBET schools can help provide resources, teacher training, and support systems to ensure these institutions deliver high-quality education and better outcomes for young learners. Observation data (collected by both the research team and the Nairobi Urban Planning team) indicate that the learning facilities in several of the visited ECDE centres were dilapidated and built without considerations for child safety. These facilities should be renovated, adhering to safe, disability-inclusive, and child-friendly standards.
- Prioritise the creation of safe, child-friendly environments including play areas, parks, and accessible public spaces that foster connections, exploration, and physical activity among children under six years of age

  Only one in ten parents surveyed reported their children had access to a playground. Having identified 138 potential

Only one in ten parents surveyed reported their children had access to a playground. Having identified 138 potential spaces across the 17 sub-counties in a mapping exercise, the county government should prioritise the creation, renovation or development of play spaces to enhance children's access to play areas across the city. Clear land ownership, proper planning, and community involvement are essential to address the current challenges and ensure the creation of sustainable play spaces.

Prioritise the implementation of parenting coaching and support programmes that promotes caregivers' capacity on the provision of nurturing care and mental wellbeing

To support caregivers' parenting capacities, the county government should integrate ECD into reproductive, maternal,

newborn and child health services. This will require scaling up parental counselling and coaching programmes through health facilities, community groups, homes and digital platforms to strengthen caregivers' capacity. Training community health promoters to deliver home-based parenting and nutrition counselling would be crucial in improving children's developmental outcomes. Nurturing care integration in health services would be critical in building caregivers' knowledge, attitudes and practices in support of responsive caregiving and early stimulation. In addition, integrating mental health issues into existing programmes and creating opportunities for screening, counselling, and referral pathways for those experiencing mental health challenges will help raise awareness, reduce stigma around mental health challenges and encouraging caregivers to seek help.

Establish, promote and enforce clear quality standards and guidelines for the operation of daycare centres and pre-primary schools across the city

The city must establish and enforce clear quality standards and guidelines for the operation of daycare centres and pre-primary schools, prioritising stimulating environments, child safety and well-being. These standards should address issues such as caregiver qualifications, child-to-caregiver ratios, caregiver-child interactions that promote stimulation and early learning, hygiene and sanitation, and emergency preparedness. The county government must rigorously enforce quality standards in Early Childhood Development (ECD) services, as outlined in the pre-primary school service standards and guidelines. Leveraging the existing Child Care Facility Act, the government should ensure that all childcare facilities meet the requisite operational standards. Prioritising child safety and well-being is paramount, with a particular focus on caregiver qualifications, child-to-caregiver/teacher ratios, hygiene, sanitation, and emergency preparedness.

Strengthen multisectoral collaboration and policy frameworks for ECD services

The city should strengthen collaborative partnerships with actors across health, education, social services, academia, funding agencies and many more, and provide stewardship in overseeing provision of ECD services, data generation on ECD outcomes, and robust monitoring systems. Strengthening the policy framework, including prioritising the development and implementation of an integrated ECD policy, is essential to effectively guide service delivery and resource allocation.