Promoting play sessions in health facility waiting areas



Background

In most low- and middle-income primary health care (PHC) settings, facility-level service providers typically have little contact time with caregivers and their children during health facility child health visits— averaging a few minutes per client. This is primarily due to human resource constraints. Therefore, it is not feasible to expect consistent counseling—including demonstration and practice—on topics such as responsive caregiving, early learning, and nutrition as part of routine PHC services.

At the same time, caregivers spend considerable time in health facility waiting areas—typically, 1–3 hours—before receiving services from a facility-level provider. In theory, waiting areas provide opportunities for both group education and individual follow-up. However, formative assessments revealed that waiting areas are not adequately used for health educational activities, except for a short health talk given to all the clients. Furthermore, these waiting areas are not child-friendly.

As part of its efforts to promote early childhood development (ECD) through PHC, PATH implemented an approach that leveraged lengthy waiting times in health facility waiting areas to provide group education on relevant topics, such as responsive caregiving and early learning. This intervention—called "playbox sessions"—also features a box of locally-made play materials for children. The use of play materials simultaneously enhances child-friendliness of waiting areas and allows service providers to counsel caregivers on how to play and talk with their children.

In Kenya, playbox sessions are generally facilitated by community health promoters (CHPs), who are formal PHC service providers and receive a government stipend. In Mozambique, playbox sessions are typically facilitated by partner-supported volunteers. In both countries, playbox facilitators were capacitated on how to conduct play sessions and develop playthings from locally available materials. Additionally, in Mozambique's Nampula Province, a partnership with schools resulted in schoolchildren developing playthings for use in playbox sessions.

By 2020, playbox sessions had been scaled up to all health facilities in Kenya's Siaya County, most facilities in Mozambique's Maputo Province, and select facilities in Monapo District of Mozambique's Nampula Province. An assessment in Mozambique revealed that playbox sessions were instrumental in educating caregivers on



A typical health facility waiting area in Mozambique. Photo: PATH.

PATH is a global nonprofit dedicated to achieving health equity. With more than 40 years of experience forging multisector partnerships, and with expertise in science, economics, technology, advocacy, and dozens of other specialties, PATH develops and scales up innovative solutions to the world's most pressing health challenges.

Address 2201 Westlake Avenue Suite 200 Seattle, WA 98121 USA Date August 2024 ECD and how to produce playthings from locally available materials. Playbox sessions were also associated with increased caregiver motivation to return for follow-up services.¹

In 2022, PATH used the process of human-centered design (HCD) to critically assess facilitators and barriers to conducting playbox sessions and, subsequently, used these insights to refine the model to enhance quality, fidelity, and consistency of playbox sessions. Observations of playbox sessions and discussions with service providers in Siaya County and Monapo District revealed the following insights:

- Playbox facilitators were good at explaining the importance of early learning and in counseling caregivers on how to integrate play into children's daily routines.
- At the same time, there was little demonstration or practice of ageappropriate early learning activities.
 When demonstration was done, it was generally limited to showing how to play with a simple plaything like a shaker or rattle. There was also little effort to encourage caregivers to talk to their children.



Playthings made from locally available materials in Mozambique. Photo: PATH.

- Facilitators encouraged caregivers to make playthings from materials available at home. However, many facilitators promoted gender-based play (e.g., dolls for girls and cars for boys).
- Most playthings found in playboxes were traditional toys such as rattles, shakers, balls, cars, and dolls. There were comparatively fewer items promoting unstructured play such as blocks, sticks, containers, and bottle caps, and few to no pictures or drawings.
- Once a facilitator finished the talk, only a few caregivers would spontaneously play or interact with their children, even when they had access to multiple play materials.
- Facility-based providers delivering maternal and child health services made no reference to play sessions when caregivers and children transitioned from the waiting areas to consultation rooms.
- When caregivers were asked to demonstrate the typical play activities in which they engaged with their children, the majority demonstrated activities that were too simple for a child's age. The most common activity (regardless of age) was to make the child bounce on a caregiver's legs and call the child by their name.
- A minimum frequency of three playbox sessions per week was associated with perceived changes in caregiver ECD knowledge and reported practices. In Mozambique, playbox sessions were not found to be taking place at this level of



A mother demonstrating how she usually plays with her daughter in Nampula, Mozambique. Photo: PATH.

¹ Karuskina-Drivdale S, Kawakyu N, Mulhanga F. A playbox intervention in health facility waiting rooms in Mozambique: Improving caregivers' knowledge, skills and communication with health professionals. *International Journal of Birth and Parent Education*. 2019;6(3):29–32.

frequency; primarily because playbox facilitators were not sufficiently motivated in the absence of an additional stipend.

The solution: Improving playbox session quality and tying it to clinical services

By reflecting on these findings, we co-created a solution with facility-based providers, playbox facilitators, and government managers that refines the existing playbox model to improve the quality and breadth of playthings; as well as promote demonstration, practice, and feedback of age-appropriate play and communication. Furthermore, the solution incorporates strategies designed to enhance the long-term sustainability of playbox sessions. The solution was structured in the form of the following steps.

STEP 1: Have a facility provider introduce a playbox session. A facility-based provider (typically a nurse offering well-child services) introduces the playbox session on a given day and informs the caregivers that s/he will want to hear what they have learned when they come into her/his room to receive the service for which they have come to the health facility.

STEP 2: Emphasize demonstration, practice, and feedback to facilitate caregiver learning. A playbox facilitator demonstrates age-appropriate early learning and responsive caregiving activities and then engages caregivers in practicing these with their children, as s/he observes and provides needed feedback.

STEP 3: Monitor and encourage ongoing play and communication with children in the waiting room.

The playbox facilitator periodically checks on caregivers as they wait for services and publicly praises those playing or talking with their children in order to motivate adoption of new practices.



A community health promoter demonstrates a play activity in Siaya, Kenya. Photo: PATH.

Additionally, an existing job aid was redesigned in the form of a flipchart that illustrates sample early learning activities from birth to five years old. The sample activities were selected to promote responsive, playful interactions between caregivers and their children and to demonstrate novel ways of using different playthings. Additionally, the flipchart provided guidance on the nature of playthings (e.g., having a mix of both structured toys, such as dolls, balls, and cars, and unstructured play materials, such as wooden blocks and sticks, picture cards, and bottle caps).

In Mozambique, with a view to promote sustainability, health facility directors were put in charge of nominating health facility volunteers as playbox facilitators, monitoring their work, and providing them some additional benefits to motivate them. This was not necessary in Kenya, where CHPs in Siaya County already maintain a roster for facilitating playbox sessions. This roster is aligned with the schedule of their routine visits to health facilities to submit reports and collect supplies.



Results

Following co-creation, PATH worked with government to train playbox facilitators in the refined solution in four high-volume health facilities in Mozambique's Monapo District and Kenya's Siaya County. A convenience sample of caregivers in health facility waiting areas was interviewed in both countries before and after implementation to probe their experiences with playbox sessions, as well as check for demonstration of early learning practices. In Kenya, the sample sizes were 48 caregivers at both points. In Mozambique, the sample sizes were 24 and 26 caregivers before and after implementation, respectively. Additionally, in Mozambique, a structured observation tool was used to assess the quality of playbox sessions facilitated by three volunteer facilitators before and after implementation.

Observation results from Mozambique show that solution implementation was associated with a significant improvement in the quality of playbox sessions, with all three volunteer facilitators scoring 80 percent or higher on the assessment tool (Figure 1).

In Kenya, solution implementation was associated with a dramatic increase in the portion of caregivers receiving relevant ECD messages from playbox facilitators and talking and playing with their children in waiting areas (Figure 2). Solution implementation was not associated with a similar increase in caregivers receiving ECD messages from playbox facilitators in Mozambique (Figure 3). This may be attributed to the model in Siaya County, where CHPs conduct playbox sessions and are expected to follow a roster outlining the days of the month when they are

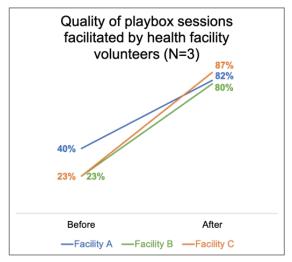


Figure 1. Quality of playbox sessions in Mozambique before and after solution implementation.

supposed to facilitate them. This roster is developed jointly with health facility management and playbox facilitation is included in CHP performance review. This is not the case in Mozambique, where playbox facilitation has relied on volunteers; thereby suggesting that having facilitators who are a formal part of the health system (and are accountable as such) may be key to quality playbox implementation.

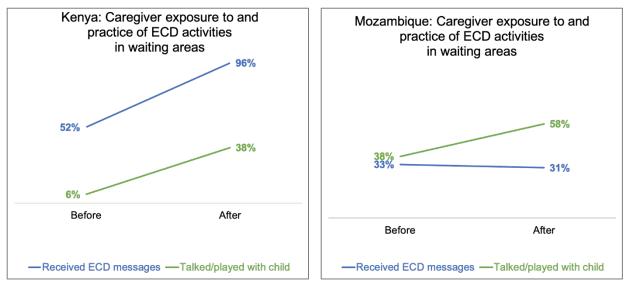


Figure 2. Caregiver exposure to and practice of ECD activities in waiting areas in Kenya before and after implementation.

Figure 3. Caregiver exposure to and practice of ECD activities in waiting areas in Mozambique before and after implementation.

We also asked caregivers to **demonstrate how they usually play with their child**, both before and after solution implementation. We expected to see that some of the play and communication activities promoted during playbox sessions would be reflected in caregiver demonstrations. Indeed, as figures 4 and 5 indicate, across both countries we noted increases in caregivers talking to their children or using play items when interacting with them. At the same time, traditional play activities, such as calling the child by name, tickling the child, or bouncing the child on the knee, essentially remained unchanged (Kenya) or decreased (Mozambique).

Additionally, in Kenya, there was a notable increase in caregivers demonstrating age-appropriate activities that are recommended in the playbox flipchart, for example, showing colorful objects to babies under six months (12 percentage-point increase); clapping, gesturing, and singing with babies 6–12 months (33 percentage-point increase); and giving complex tasks requiring cognitive skills like naming, sorting, and counting to older children (21 percentage-point increase). Once again, it appears that this may be associated with the use of remunerated CHPs as playbox facilitators, who have already been trained on multiple aspects of ECD and are expected to deliver playbox sessions as part of their mandate.

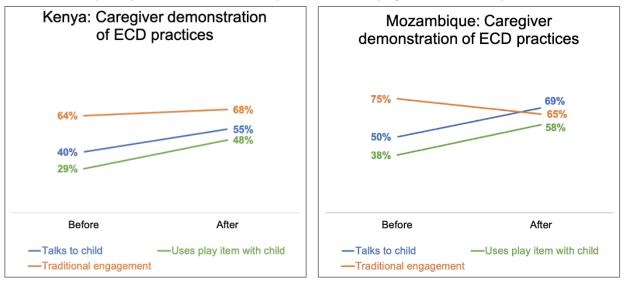


Figure 4. Caregiver demonstration of ECD practices in Kenya before and after solution implementation.

Figure 5. Caregiver demonstration of ECD practices in Mozambique before and after solution implementation.

"The CHP asked for the [Mother & Child Handbook], took the child's weight and height, and then divided us into small groups according to the child's ages and taught me how to play and talk with my child." (Caregiver, Bar Ndege Dispensary, Siaya, Kenya)

Overall, the testing of the refined playbox model suggests that playbox facilitators are able to implement it with fidelity and that it is associated with increased caregiver exposure to and practice of recommended play and communication activities.

Next steps

In Mozambique, PATH is supporting efforts to finalize a Ministry of Health ECD in-service training manual, which includes a module on playbox sessions in health facility waiting areas. However, the lack of consistent remuneration for volunteers facilitating these sessions continues to be perceived as a major barrier to their consistent implementation and scale-up. As such, a more systemic workforce solution may be required. In Kenya, advocacy at both county and national levels is needed to support continued uptake of playbox sessions and include it as part of the mandate of CHPs in counties beyond Siaya. A compelling rationale to use for advocating for playbox sessions can be their role in potentially encouraging clients to return for follow-up services—including antiretroviral therapy for HIV.