Assessment of the use of PATH's early childhood development monitoring and counseling materials in Maputo Province, Mozambique

### Background

In Mozambique, the under-five mortality rate has been steadily decreasing in the last two decades. While more children are surviving, it is estimated that nearly 61 percent of children under five years are at risk of poor development due to poverty, malnutrition, poor health, and home environments with few learning opportunities. These children are therefore not thriving and reaching their full potential in life.

Since 2016, the United States Agency for International Development (USAID)/Mozambique has partnered with the Conrad N. Hilton Foundation and PATH in an innovative publicprivate partnership (PPP) to support the Government of Mozambique to systematically scale up provision of early childhood development (ECD) interventions (developmental monitoring and counseling) through facility- and communitybased health services in Maputo Province. The PPP has focused on building capacity of service providers and their supervisors through training, mentoring, and supportive supervision, as well as through provision of job aids and information, education, and communication (IEC) materials.

PATH conducted an operations research study to:

- 1) Document trends in developmental monitoring and referral to specialists.
- Assess the performance of facility-based health care providers (HCPs) as it relates to following the monitoring and counseling approach recommended by PATH and use of the PATH-developed job aids and IEC materials.
- Assess the usability of PATH's developmental monitoring and counseling posters.
- Assess the performance of facility-based HCPs as it relates to using the recently updated Ministry of Health (MOH) Integrated Management of Childhood Illness (IMCI) job aid, which incorporates ECD content.
- 5) To assess caregiver ability to recall ECD messages after exposure to facility-level ECD counseling.

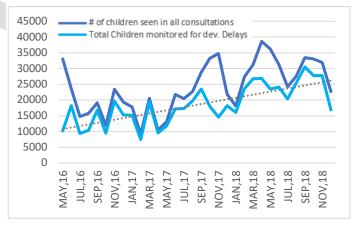
### Methods

PATH collected quantitative data on consultations and referrals from 49 health facilities, as well as qualitative data from the 18 priority health facilities where the ECD intervention has been implemented more intensively. Data collection took place from September to November 2018 through review of health facility registers (n=49), observation of HCPs providing consultations (n=37 health workers, 63 observations), in-depth interviews with HCPs (n=37), self-administered questionnaires for HCPs (n=37), in-depth interviews with physiotherapists (n=4), and interviews with caregivers (n=237).

## **Findings**

#### Trends in developmental monitoring and counseling

During the project period, 590,660 children 0–3 years and their caregivers received developmental monitoring and counseling in the study sites and 2,157 children were identified with a suspected developmental delay. There is a positive/increasing trend in the number of children and their caregivers receiving developmental monitoring and counseling over time. Despite this positive trend, overall only 0.4% of children were identified with a suspected delay, which is lower than would be expected (0.8% of children 0–4 years have disabilities, according to the 2017 Census, while 2.1% suffer from severe acute malnutrition according to the 2011 Demographic and Health Survey, which is a proxy indicator for developmental delays).



Trends in developmental monitoring and counseling over time.

87% of HCPs reported identifying more children with developmental delays since being trained and provided with materials. Physiotherapists mentioned that the project contributed to an increase in referrals for developmental delays. However, only 30% of HCPs conducted developmental



monitoring in more than 70% of their consultations. In addition, most providers relied on parental reporting of attainment of milestones as opposed to direct observation. Furthermore, 49% of HCPs considered how children did on anthropometric measures to "guess" her/his developmental status and only 24% monitored children's developmental milestones.



Nurse integrating developmental monitoring and counseling into consultation for children at risk. Photo: PATH

# Use of job aids and IEC materials

The job aids and IEC materials developed by the PPP were on display and available in in most consultation rooms. HCPs perceived them as being easy to use. The most widely used tool was the developmental milestones poster (used in 60% of observed consultations). This is an important finding since the MOH has recently approved this poster for national use as part of routine well-child consultations. On the other hand, the MOH IMCI job aid which includes ECD was not present in more than half of observed consultations in those touchpoints where it should have been found. Moreover, almost half of HCPs had not received training on it.

# Caregiver exposure to ECD messages

More than half of the caregivers exiting a consultation reported that they had not received any information on how to stimulate their child's development, which is consistent with health workers' reported frequency of counseling provision (51% of health workers stated that they were able to provide ECD counseling to caregivers in 30–70% of their consultations). However, close to half of the caregivers who reported receiving counseling in the first interview did recall the messages in the follow-up interview, a month after the first. While a positive finding, it does suggest that measures need to be undertaken to

further improve retention of key messages and promoted behaviors.

## Discussion

While the study suggests that developmental monitoring may not be taking place consistently enough for all potential cases of developmental delays to be identified, the results may also be reflective of the limitations of the approach used. While milestones-based monitoring is easy to roll out at scale, it is not as sensitive as an assessment of individual development against development standards. Additional finding that HCPs sometimes fill out registers to indicate developmental monitoring while not actually having done the activity might also be contributing to the low rate of children identified with a suspected delay.

The study indicates that integration of developmental monitoring and counseling into routine health services by HCPs is beginning to be established in Maputo Province. Based on experience of integrating interventions such as HIV screening and counseling and family planning into routine maternal and child services, introduction of developmental monitoring and counseling will take time. Training, mentoring, and supervision of providers, as well as provision of IEC materials are important but may not be sufficient. A stronger enabling policy environment is critical to support more robust implementation.

With this in mind, the PPP team advocated for the inclusion of an ECD indicator (number of children with suspected developmental delays) into sick child and well-baby clinic registers, so that developmental monitoring and counseling are seen as an integral component of these services. With wellbaby clinic and at-risk child consultation norms currently being revised to be aligned with the new registers, the MOH may need to issue directives to the provinces to promote adequate data collection and analysis of this indicator. This may include setting targets for detection of developmental delays and ensuring that data trends are being monitored at all levels and feedback is provided to inform decision making.

The MOH has also approved the use of the developmental milestones poster developed under the PPP for use in well-baby clinic consultations nationally and has mobilized partners to disseminate them. This strategy will allow developmental monitoring to be promoted in a cost-effective manner at scale.

Furthermore, the results suggest that measures may need to be taken to increase key message recall among caregivers. These may include ensuring relevance of messages to caregivers, ensuring that messages are age appropriate, improving

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Date Published June 2019 interpersonal communication skills of HCPs, and providing takehome materials to caregivers of vulnerable children.



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