Title: Improving First DNA-PCR uptake for HIV-exposed Infants in Southwestern Uganda

Track and Category: E17

Authors: Nakachwa I, Bitarakwate E, Mugumya L, Natumanya E, Walakira M

Affiliation: Elizabeth Glaser Pediatric AIDS Foundation (EGPAF), Uganda

Background: In conjunction with the Uganda Ministry of Health, the Elizabeth Glaser Pediatric AIDS Foundation (EGPAF) under the USAID-funded STAR-SW project (2010-2015), supported prevention of mother-to-child HIV transmission (PMTCT) at 234 health facilities in 13 districts in southwestern Uganda. By 2011 only 25% of expected HIV-exposed infants (HEIs) in the region were receiving an initial polymerase chain reaction (DNA-PCR) test within 12 months after delivery, at a median age of 2.7 months.

Program description

EGPAF analyzed factors contributing to this gap and implemented four major interventions to improve coverage: 1) scaling up testing to more facilities through a sample transportation network, using motorbikes to ferry blood samples and test results between facilities and the central public health laboratory; 2) streamlining supply-chain management to ensure availability of EID commodities; 3) supporting retention of HIV-positive mothers through family support groups (FSGs); and 4) training staff in active screening for HEIs in immunization clinics and other service points and collecting samples at the mother-baby care points within MCH services.

Lessons Learnt

To improve first DNA-PCR uptake for HEIs, key bottlenecks must be identified at all points in the PMTCT cascade and addressed. While scaling up access to DNA-PCR testing led to an initial spike in uptake, incremental gains in the total number of infants tested and quality of the service were only realized after targeted interventions were implemented to resolve PMTCT programming gaps (see fig 1). The median age at first DNA-PCR progressively reduced from 2.7 to 1.8 months (see fig. 2) while DNA PCR positivity fell from 8.3% to 3.7%.

Conclusion

Scaling up DNA-PCR services should be complemented by interventions to improve program quality.
Fig. 1: First DNA-PCR uptake for HIV-exposed infants in Southwestern Uganda 2011-2015

Fig. 2: Median age of first DNA-PCR test in southwestern Uganda, 2011-2015