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Background

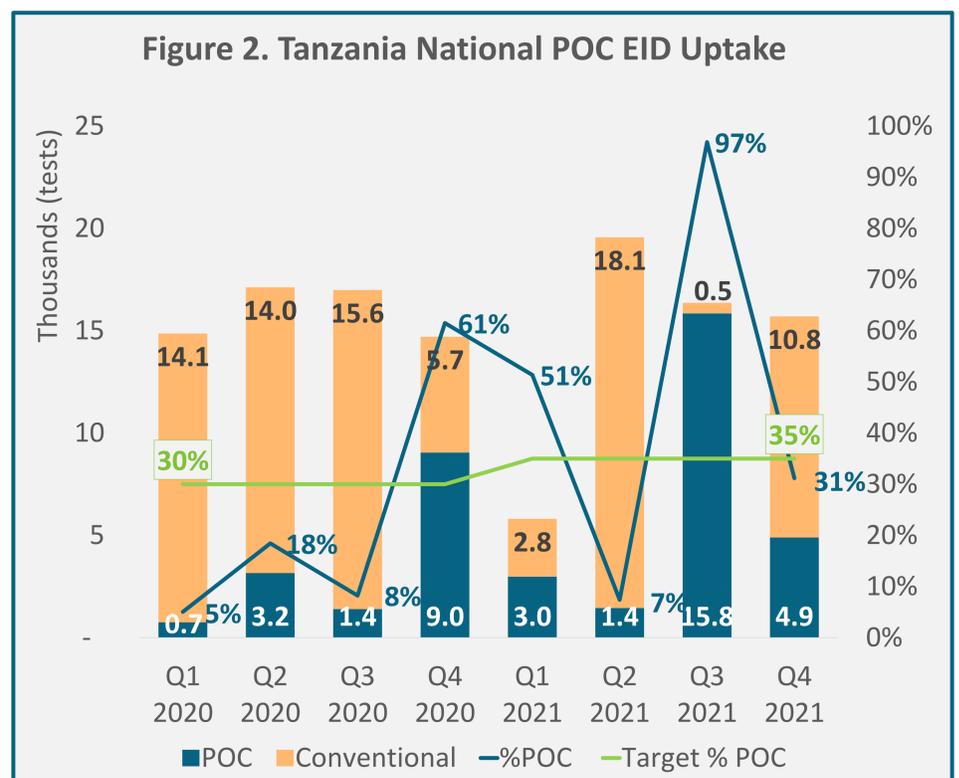
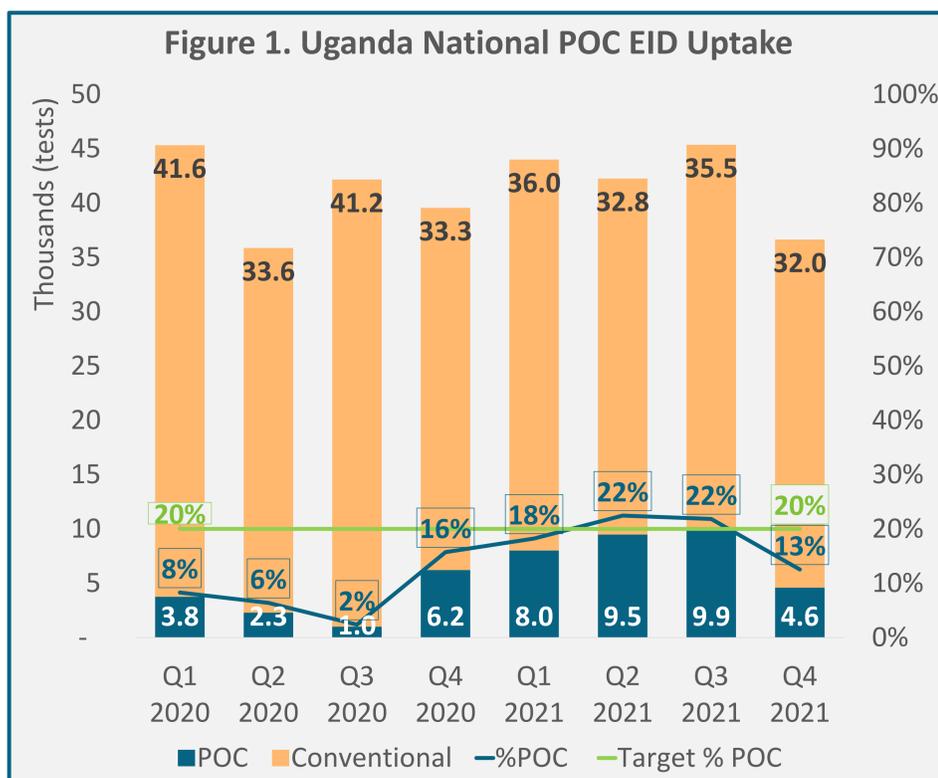
- Globally, early infant diagnosis (EID) of HIV remains sub-optimal at 63% coverage within two months of birth.
- WHO recommends point of care (POC) EID testing for HIV-exposed infants;
 - to reduce turnaround time for results
 - to improve linkage to lifesaving antiretroviral treatment for infants testing HIV-positive.
- However, POC EID uptake has remained low in most countries.
- As a strategy to scale up POC EID, the Faith-based Action for Scaling up Testing and Treatment for the Epidemic Response (FASTER) program provided national-level coordination and monitoring, and on-site support to Ministries of Health (MOH) in Uganda and Tanzania.
- This analysis presents national uptake of POC EID over time.

Methods

- FASTER installed 100 m-PIMA POC devices in Uganda for EID
- Activated 47 additional GeneXpert POC sites to receive dried blood spots (DBS) for EID from neighboring clinics in Tanzania (procured thermomixers, expanding capacity to perform in a hub-and-spoke model).
- Supported national-level EID commodity stock monitoring, routine program data reviews, training for key health and laboratory personnel, and data connectivity to national information management systems and dashboards.
- From routine performance data collected from national laboratory data systems, we calculated the change in proportion of national EID testing volumes conducted on POC platforms, 'POC EID uptake,' in Uganda and Tanzania between **January-March (Q1) 2020**, 'before FASTER' and **October-December (Q4) 2021** (July-September [Q3] for Uganda only), 'after FASTER', comparing against the MOH national target for 2021.

Results

- This analysis of national POC EID testing volumes in Uganda and Tanzania is representative of **132** and **99** sites, respectively.
- In **Uganda**, national POC EID uptake increased by **163%**, from **8%** (3,758/45,319) in Q1 2020 to **22%** (9,899/45,362) in Q3 2021, peaking at 27% (4,105/15,458) in August 2021, against a 20% national target. However, POC EID uptake dropped to 13% (4,593/36,633) in Q4 2021 due to facility-level stock-outs and COVID-19 travel restrictions (*Figure 1*).
- In **Tanzania**, POC EID uptake increased **519%**, from **5%** (748/14,860) in Q1 2020 to **31%** (4894/15,700) in Q4 2021, against a 35% national target, though wide fluctuations in uptake occurred across quarters due to central-level stock-outs of both POC and conventional reagents (*Figure 2*).



Conclusion

- POC EID uptake increased following testing site expansion and implementation of targeted site-level programmatic support but was not consistent quarter over quarter due to challenges associated with commodities and travel restrictions in the context of COVID-19.
- Efforts are needed to stabilize EID commodity supply chains and optimize the testing network to further expand POC EID uptake and reduce turnaround times.
- Recommended strategies include assessment of spare POC device testing capacity and laboratory readiness for integrating HIV testing; strengthening central- and facility-level supply chain planning and monitoring and feedback loops; strengthening of POC device data connectivity to national systems; instituting sustainable models for targeted training and mentorship of health care providers; laboratory and monitoring and evaluation (M&E) personnel; and strengthening EID demand generation and mother-infant-pair tracking systems.

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The findings and conclusions are those of the authors and do not necessarily represent the official position of the Centers for Disease Control and Prevention.