INSTITUTIONAL BARRIERS TO IMPROVE ACCESS TO DRY BLOOD SAMPLE COLLECTION IN NORTH-WESTERN NIGERIA: A 12-MONTH RETROSPECTIVE DATA REVIEW OF PARTNERSHIP WITH NIGERIA POSTAL SERVICE FOR SAMPLE TRANSPORTATION

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Background Institutional challenges still limit access of exposed infants to dried blood spot (DBS) sampling at 6 weeks in Nigeria. There is a paucity of data to evaluate the impact of multiple interventions in addressing these challenges. The objective of the study was to review institutional barriers and issues regarding access of exposed infants to DBS sampling in 6 general hospitals. The study was supported by Management Science for Health and funded by USAID in Kebbi State, Nigeria.

Methods Review of the partnership with Nigeria Postal Service for DBS transportation (6 months after the take-off in October 2014) was conducted in April 2015. It revealed that 34% of exposed infants had access to DBS sampling at 6 weeks. This led to key informant interviews with 36 healthcare workers across 6 hospitals with identification of 5 major institutional challenges limiting access to DBS collection. Targeted interventions included: strengthening of Intra-facility referral; incorporation of adherence and tracking into PMTCT/Early Infant Diagnosis service, development of the capacity of hospital staff on the DBS collection process and documentation in PMTCT service tools. The outcome was then evaluated at 6 months.

Results By October 2015, the repeat evaluation showed that the number of DBS samples collected increased from 42 to 138 and results received increased from 31 to 112. The average turn-around time improved from 70 days to 43 days, and DBS sampling access increased from 32% to 86%, all within 6 months of the interventions.

Conclusions Multiple structured interventions have the potential to improve access of exposed infants to DBS sampling for early infant diagnosis. The study will inform implementers on how best to improve early infant diagnosis in poor-resource settings through interventions aimed at institutional barriers. Point-of-care testing for DBS needs to be scaled up.