Assessing Use of Health Facilities in the Iganga Mayuge Health and Demographic Surveillance Site (IMHDSS) Uganda to Evaluate Obstetric and Neonatal Outcomes

Background Several vaccines in development target immunization in pregnancy to reduce maternal and neonatal mortality and morbidity. Monitoring the safety of these transformative vaccines presents new challenges, especially in low and middle income countries. The Global Alignment for Immunization Safety Assessment (GAIA) has developed standardized case definitions for five obstetric and five neonatal case definitions tiered by level of available evidence/health care resource.

Objective To assess use of health centers and a public hospital in the IMHDSS to collect diagnostic criteria needed to evaluate the GAIA case definitions.

Methods The IMHDSS is located in Eastern Uganda and consists of 65 villages with a total population of 89,000. Within the IMHDSS there are 15 government-accredited health centers and one public hospital that provide ante-natal care (ANC) or delivery services to pregnant women. From January 9-17, 2017, health care workers at each of the 15 health facilities and public hospital were interviewed about the facility’s clinical diagnostic and laboratory capabilities and data systems. Five obstetric and 5 neonatal case definitions were evaluated, respectively: hypertensive disorders, non-reassuring fetal status, postpartum hemorrhage, pathways to premature birth, maternal death, stillbirth, preterm birth, congenital anomalies, infection, and neonatal death. Definitions based on the greatest available evidence were designated as level 1, while definitions that lacked specificity were designated as level 3.
Results Heterogeneity in capabilities existed by type of health facility most notably by government-designation of level of ANC services and public vs private funding. The hospital had the greatest capabilities to assess all 10 case definitions including those definitions that were highly specific (level 1). Additional analytic data will be presented at the conference.

Conclusions Building capacity at facilities that provide ANC and delivery services is critical to assessing obstetric and neonatal outcomes in order to improve pharmacovigilance systems.