**Using the EquityTool to Determine Socio-Economic Status in the Kintampo Health Demographic Surveillance Area: A Feasibility Study**

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**Background**

Wealth is a known household characteristic that largely affects health particularly in Sub-Saharan Africa. The wealth index was developed in 2001 as a reliable way to capture Socio-economic Status (SES) based on asset ownership and household characteristics using principal component analysis (PCA).

However, the Wealth Index questions are lengthy (25-50 questions), time-consuming, and often difficult to analyse. To address these challenges, the EquityTool was created by Metrics for Management (M4M) and partners. The Ghana Equity Tool simplifies the full DHS Wealth Index to collect 13 highly significant country-specific questions. It also offers automated calculations on Stata and SPSS. It benchmarks results to national population

The Kintampo Health Research Centre is one of three research centres in Ghana. The centre has a Health and Demographic Surveillance System (KHDSS) which captures vital including SES. The SES questionnaire is however lengthy and calculated using the regular PCA method with its challenges. It is also not benchmarked to national population. To address these challenges and achieve universal health coverage, KHRC in collaboration with M4M piloted the EquityTool under the Continuum of Care (CoC) project. The CoC project was a family planning (FP) implementation research which made use of a card and stars to encourage women (15-49) to use FP

**Objective**

* To pilot the EquityTool and compare with the standard KHDSS questionnaire under the CoC project

**Methods**

This was a cross sectional survey carried out between February to March 2018 using Research Electronic Data Capture (REDCap) as part of project endline. Women of reproductive health age were sampled using the KHDSS which covers predominantly rural communities in Kintampo North and South districts where the CoC tudy was implemented. Wealth index for participants was measured using the equity tool and the standard KHDSS questions which were both incorporated into REDcap. Two measures of agreement namely, percent agreement and Cohen’s Kappa was used to assess the agreement between the two set of items

**Results**

The percent agreement between the equity tool and the KHDSS questionnaire was 43.84%. A fair Cohen’s kappa of 0.298 was obtained. Kappa >0.75 is excellent

**Conclusion**

The EquityTool was effectively used to measure wealth index. The fair Kappa could be attributed to the fact that the KHDSS questions are targeted primarily towards rural communities and not benchmarked to the national population.

Although the agreement between the KHRC questions and the EquityTool questions was fair, the latter is preferred since it is benchmarked to the national population.