

mHealth-Assisted Conditional Cash Transfers to Improve Timeliness of Vaccinations (MINT)

ClinicalTrials.gov ID NCT03252288

Statistical analysis

For each participant, outcomes are observed at three time points (corresponding to timely vaccinations at 6, 10 and 14 weeks, respectively). The probability of timely vaccinations and its association with reminders and incentives will be analyzed in a bivariable analysis and using a random effects logistic regression model. The outcome variable is 1 if the vaccination was received on-time, and 0 if early, delayed, or not received at all. The primary covariates of interest are indicator variables for the receipt of reminders only (“*reminder*”) and the receipt of reminders with an incentive offer (“*reminder+incentive*”). For arm 1 the value of both covariates is 0 for all three time points. For outcomes in arm 2, the value for *reminder* (and for arm 3 the value for *reminder+incentive*) is 1 if the mHealth system confirmed delivery of the reminder, and 0 for all other observations. Additional covariates (e.g. mother’s education, rural vs. urban residence, recruitment from health facilities vs. the community) will control for differences in participant characteristics between study arms and their association with vaccination timeliness. Interactions of *reminder* and *reminder+incentive* with these covariates describe systematic variation in the effects of reminders and incentives on vaccination timeliness. Models will control for the number of phone-based contacts prior to or within the timeliness window for any given vaccination, and standard errors will be adjusted to account for clustering at the level of the health facility catchment area.