Baby's First Years

## **BFY Randomization Procedures**

Randomization occurred within each of the four sites. The first step in the randomization process was to create four rosters of 250 rows each, with 150 rows designated as "low cash gifts" and 100 designated as "high cash gifts". Each of the four 250-row rosters was then randomly ordered. Rows were assigned consecutively-numbered cash gift IDs. The resulting roster data on high vs. low RCT cash gift condition and cash gift IDs were then stored on the survey contractor's server.

As the May, 2018 to June, 2019 recruitment period in hospitals during the immediate postnatal period proceeded, it became clear that IRB and other institutional issues in one site (the Twin Cities) would lead to fewer than 250 recruited participants. This led to a roughly equal increase in the number of roster rows in the other three sites. To accomplish this, additional roster rows were created in each of these sites using the same randomization procedure. When aggregated, the 1,000-row roster matched exactly the 40%/60% distribution of cash gifts across all possible respondents.

The second step was to create a web-based application that, when interfacing with the interviewers' questionnaire software program, could access these rosters, determine the highvs. low cash gift condition to be offered to each participant, record that the condition was offered, and return the gift value for the interviewer to share with the participant.

The interviews themselves were conducted using the Blaise-based Computer-Assisted Personal Interview program (version 4.8). After a participant was successfully recruited in the hospital and agreed to receive a cash gift, the Blaise instrument accessed the web application with a pre-loaded link. The web-based application collected information on the site and the IDs of both the respondent and interviewer from the Blaise software for validation purposes. Once that information was processed, the web application accessed the randomized roster for the specified site, retrieved the next available cash gift ID and its amount, and recorded for which respondent, on which date, and by which interviewer it has been claimed. These requests for cash gift assignments could have come from any of the hospitals within the site and were processed in the order in which they were received by the web-based application. Cash gift amounts, the cash gift ID and respondent ID were displayed (via Blaise) to the interviewer for confirmation, along with the randomly-generated monthly gift amount. The interviewer confirmed the information and proceeded with the interview by announcing the cash gift amount to the respondent and setting up a debit card with that amount so that the participant could use it right away.

Taken together, these procedures ensure a randomization process in which the interviewers could not influence the assigned amount. At the same time, the procedures unblinded both the participant and the interviewer to the gift amount during the recruitment period. In subsequent rounds of data collection, interviewers were not reminded (or, in the case of different interviewers, informed) of participants' treatment status during follow-up assessments. Of course, participants were reminded of the cash gift amount on a monthly basis.