

PMA Survey Protocol

Background

The PMA surveys are designed to collect nationally or sub-nationally representative data on family planning and other key women's health measures through three related data collection activities: Household and Female surveys (HQFQ), Service Delivery Point (SDP) surveys, and Service Delivery Point Client Exit Interview (CEI) surveys. The PMA program currently operates in eight countries: Burkina Faso, Côte d'Ivoire, Democratic Republic of Congo, India, Kenya, Niger, Nigeria, and Uganda.

The female survey is an open, prospective, observational cohort design. PMA uses the power of this design to measure contraceptive dynamics and changes in women's fertility intentions over time. The female survey includes measures on awareness, perception, knowledge, and use of contraceptive methods, components of health service provision, perceived quality and side effects of method among current users, birth history, fertility intentions, and domains of empowerment. The household questionnaire collects basic household roster information and information on observed dwelling unit characteristics, such as type of floor and roof, which is used used to generate a household wealth index.

The SDP and CEI surveys assess availability and provision of family planning technologies and services and the quality of reproductive health services at health facilities. The SDP survey also collects information on contraceptive stockouts and facility readiness to offer and manage family planning care.

PMA is based on a multi-stage stratified clustered sampling design, using urban-rural and/or major regions as the sample strata. Geographical clusters or enumeration areas (EAs) are the primary sampling units and are obtained from the national statistical agency of each respective geography. EAs are selected using probability proportional to size (PPS) methods. Residential dwelling units and private health facilities are listed and mapped and a listing of all public health facilities that serve selected EAs is obtained from the Ministry of Health. Approximately 35 dwelling units in each EA are randomly selected for inclusion

in the cross-sectional HQFQ. The SDP survey is administered to all public health facilities and up to three private health facilities that serve the sampled EA.

A cadre of female data collectors who are familiar with the local communities, known as resident enumerators (REs), oversee administration of the PMA surveys. The HQFQ survey is conducted on an annual basis (called *Phase*) with panel follow-up at Years 2 and 3 (Phases 2 and 3). The SDP panel survey is conducted at year one with scheduled follow-up at Years 2 and 3 (Phases 2 and 3). The CEI survey is administered at each annual survey phase at high-client volume SDP facilities. CEI and SDP interim surveys are conducted four to six months after baseline.

A review of PMA protocol terms is found in [Appendix A](#).

Protocol

HQFQ and Female Panel

REs administer the household questionnaire and female survey (HQFQ) to 35 randomly selected cross-sectional dwelling units in each EA. At Phase 1, all resident women ages 15–49 in selected households were identified as eligible for the female survey. REs consented females into the study and administered the female survey in a secure and confidential setting. Women who consented to follow-up were enrolled in the female panel study with planned panel follow-up at Phases 2 and 3.

Subsequent phases follow standardized PMA procedure, where REs relocate and administer HQFQ surveys to households residing cross-sectional dwelling units and attempt to locate all panel women. At Phase 2, REs returned to the same dwelling units interviewed at Phase 1 and administered the female survey to all consenting women ages 15–49 in the household, regardless of their resident status at Phase 1. New women in the household were eligible to enroll in the female panel study if they consented to follow-up for Phase 3. For panel woman who remained in their original Phase 1 dwelling unit at Phase 2, REs administered the female survey per standard PMA protocol and asked participants if they agreed to follow-up for Phase 3. For panel woman who left their Phase 1 dwelling

unit and moved to another dwelling unit in the study area, the RE attempted to locate the new dwelling unit and administer the female survey at the “panel woman follow-up” location.

PMA uses the terms temporarily Lost to Follow-Up (LTFU) and permanently LTFU to track and manage panel women status at Phase 2. A panel woman is classified as temporarily LTFU if she no longer lives in the study area, is known to be in the study area but unreachable after multiple follow-up attempts, if she is incapacitated at the time of survey administration, or if her household refuses participation. PMA will attempt recontact with women who are temporarily LTFU at Phase 3. A panel woman is considered permanently LTFU if she withdraws consent, if her household no longer resides in the study area and she is unable to be located at another dwelling unit, if she refuses the FQ at Phase 2, or if she has died.

Phase 1 cross-sectional dwelling units that were destroyed, not found, or converted into non-residential structures between Phases 1 and 2 were classified as LTFU¹. To maintain representativeness, new dwelling units were randomly selected to replace dwelling units in EAs where more than 10% of dwelling units were LTFU. These new dwelling units are considered part of the PMA cross-sectional sampling frame and will be revisited at Phase 3.

Phase 3 protocol follows a similar protocol to Phase 2. REs will relocate and administer surveys to households living in cross-sectional dwelling units and attempt to locate all panel women who consented to follow-up at any previous Phase and remain in the study area. PMA will select replacement dwelling units in EAs where more than 10% of dwelling units are destroyed, not found, or converted into non-residential structures.

At Phase 3, a panel woman is classified as LTFU if her household refuses participation, if she no longer resides in the study area, if she is unable to be reached after multiple follow-up attempts, if she dies, or if she ages out of the study (is aged 50+ by Phase 3).

¹ At Phase 2, Burkina Faso, DRC, Kenya, Nigeria, included “vacant” dwelling units in the definition of LTFU.

SDP Panel

PMA intends to interview all public health facilities and up to three private health facilities in each EA during the annual survey phase. Health facilities that consented at Phase 1 constitute the SDP panel sample and are reinterviewed at subsequent Phases. New public health facilities that serve the study area are added to the PMA sampling frame and interviewed. SDPs are considered LTFU at Phases 2 and 3 if the facility permanently closes and is not replaced by a new facility or if the facility moves and no longer serves the study area.

CEI Survey

The CEI sample consists of female clients who obtain family planning services at high-volume SDP facilities. REs attempt to interview all female clients on the day of the SDP interview. PMA will not conduct the CEI survey at Phase 3.

Interim Surveys: SDP and CEI

PMA conducts interim or “follow-up” SDP or CEI surveys in-between the annual survey phases.² Kenya, Nigeria, Burkina Faso, Cote d’Ivoire, Uganda, and Niger country teams facilitate the CEI interim survey and Rajasthan and DRC administer the SDP interim survey. The CEI interim survey is administered to clients who received a method or a prescription for a method at the baseline CEI and consented to being contacted for follow-up. REs conduct interviews via telephone to gauge post-visit contraceptive practices and service experience. PMA administers the SDP follow-up survey to all public and private health facilities who consented to follow-up at the time of the baseline survey. Interim surveys will not be conducted at Phase 3.

² A standalone COVID-19 survey was conducted in Burkina Faso, Côte d’Ivoire, Nigeria, and Kenya, in lieu of the Phase 1 interim survey.

PMA Female Samples

The PMA sample comprises of female respondents who are classified as cross-sectional participants, panel participants, or both cross-sectional and panel, depending on participation in the previous phase and the location of follow-up.³ The embedded female panel cohort design allows for HQFQ datasets to be restricted to sub-samples based on these classifications. At Phase 2, female respondents who participated at Phase 1, consented to follow-up, and remained in their original Phase 1 dwelling unit are counted as both cross-sectional women and panel cohort women since their data contributes to both/either panel and/or cross-sectional estimates. A female respondent from Phase 1 who consented to Phase 2 follow-up but moved from her original dwelling unit to a “panel woman follow-up” dwelling unit in the study area is considered a panel woman only at Phase 2.

Similarly, female respondents who consented to follow-up in the previous phase and are found at their original dwelling unit at Phase 3 are counted as both cross-sectional and panel women. Female respondents found at a follow-up dwelling unit in the study area are counted as panel women only, and their data will not contribute to cross-sectional estimates.⁴

³ PMA cross-sectional data refers to observations from randomly selected, cross-sectional dwelling units. PMA panel data refers to data collected from panel women. Panel women are a subset of the full PMA female sample.

⁴ Panel women who withdraw consent or refuse follow-up can not reenter the panel cohort. However, these female respondents may choose to participate in the female survey during the time of Phase 3 HQFQ survey administration. They will be considered cross-sectional women only.

Appendix A: Glossary

Baseline:

The first time the household, woman, SDP, or client was interviewed.

Cross-sectional Dwelling Unit:

A Phase 1 dwelling unit that was not replaced at Phase 2; a newly selected Phase 2 dwelling unit or a newly selected Phase 3 dwelling unit. The household members in a cross-sectional dwelling unit contribute to the cross-sectional sample.

Dwelling Unit:

A physical structure where household(s) reside.

Dwelling Unit Lost to Follow Up (LTFU):

A dwelling unit is considered LTFU if vacant, destroyed, not found, or if the address is no longer a dwelling unit.

Newly Selected Dwelling Unit:

Dwelling units randomly selected to replace dwelling units that were determined LTFU at Phases 2 or 3. This occurred in EAs/Clusters with >10% of dwelling units LTFU.

Panel Cohort:

The sample of age-eligible, consenting women who have enrolled in the panel study and remain eligible at follow-up. Panel women and panel cohort may be used interchangeably.

Panel Woman Dwelling Unit:

A dwelling unit not selected for the cross-section where a panel woman resides. This occurs when a woman who consented to follow-up at Phase 1 was discovered to have moved out of her Phase 1 dwelling unit and into a new dwelling unit in the study area at Phase 2. At Phase 3, a panel woman may also be located at a panel woman follow-up dwelling unit if she is

discovered to have moved from her Phase 1 dwelling unit, her Phase 2 panel woman follow-up dwelling unit (and potentially both), or a newly-selected Phase 2 dwelling unit.

Panel Woman Temporarily Lost To Follow Up (LTFU):

A panel woman who did not complete the FQ at Phase 2 but is still eligible for follow-up at Phase 3 because her household still lives in the study area.

Panel Woman Permanently Lost To Follow Up (LTFU):

A panel woman who is not eligible for follow-up at Phase 3 either due to her death, refusal, or her and her household's permanent migration out of the study area at Phase 2. Any panel women who do not complete the FQ during Phase 3 are also permanently LTFU.

Phase 1 Dwelling Unit:

A dwelling unit that was randomly selected for the cross-section at Phase 1 and was revisited for the cross-section at Phase 2.

Study Area:

The area within which REs should attempt to find panel women that have moved out of their baseline dwelling units. The definition of study area is *country specific*.

Phase 1 (Year 1)

35 dwelling units randomly selected in EA

Eligible women ages 15-49 who consent to follow-up are enrolled in panel survey

Phase 2 (Year 2)

Panel women found at original dwelling unit (FQ administered)

Phase 1 dwelling units revisited (HQ administered)

Panel women relocated to new panel dwelling unit in study area (FQ administered)

Interviewed and does not consent to P3 follow-up

Interviewed and consents to P3 follow-up

Eligible consenting women ages 15-49 enrolled in panel survey

Interviewed and consents to P3 follow-up

Interviewed and does not consent to P3 follow-up

Panel women temporarily LTFU**

- Moved in study area between phases but not reachable at new panel dwelling unit
- Original household remains in study area but panel woman is not in study area
- Household refuses HQ
- Panel woman is a resident but is incapacitated or not available for survey

Eligible consenting women ages 15-49 enrolled in panel survey

- New women in Phase 1 dwelling unit
- Women who reside in *newly selected replacement dwelling units*

Panel women permanently LTFU

- Does not consent to Phase 3 follow-up
- Refuses FQ at Phase 2
- Entire household has left study area
- Deceased

Phase 3 (Year 3)

Panel women found at original dwelling unit

Phase 1 dwelling units, Phase 2 replacement dwelling units, and panel dwelling units revisited

Panel women relocated to new dwelling unit in study area*

* Study area may extend beyond original EA. Geography-specific.

** Planned follow-up at Phase 3