



PMA
PERFORMANCE MONITORING FOR ACTION



R E T R O S P E C T I V E

The Performance Monitoring for Action Platform has been operating for more than ten years and continues to produce high-quality data on family planning, reproductive health, gender, and other topics.

As we complete the second phase of the project, during which time we initiated the collection of longitudinal panel data in all countries, we look back at our accomplishments, focusing on our study design, measurement expertise, Covid-19 pivot, connections with policies and programs, considerable research portfolio, numerous innovations, and the incredible work of PMA Resident Enumerators.



STUDY DESIGN



PMA features an innovative study design that is best described as a longitudinal panel with embedded cross-sections. For this design, households are followed over time, with all eligible women (aged 15-49) interviewed in each PMA “Phase” (which occurs on an annual cadence). To date, PMA has completed three phases of interviews in all countries. Such longitudinal panel data are very rare in any field, particularly family planning and exceptionally rare at the national level. These data permit one to measure and examine contraceptive dynamics over time for individual women, among other analyses.

In addition to the longitudinal panel design, PMA also produces the cross-sectional estimates of key family planning indicators that are of interest to many. To do so, PMA replaces women who leave the study sites with randomly selected new respondents, which ensures that the sample size doesn’t decrease over time and that the cross-sections are representative.

In addition to the female and household surveys, PMA also samples family planning health service delivery points (SDPs) that provide family planning. These SDPs are sampled as those that serve the enumeration areas where PMA’s households are

located. The SDPs include both public and private facilities, and a range of each type (pharmacies, health centers, hospitals, etc). Combining the SDP and the female surveys represents the supply and demand sides of family planning.

Finally, PMA also conducts client exit interviews (CEIs). These CEIs are among women visiting a PMA sample SDP for family planning services (which mostly consists of those obtaining a contraceptive method). PMA then conducts follow-up surveys among these clients by phone approximately six months later to examine baseline CEI factors that predict contraceptive discontinuation that occurs later.

The PMA platform collects data that are comparable across all program countries and consistent with existing nationally representative surveys. To accomplish this, PMA developed standard household, female, service delivery point, and client exit interview questionnaires. These standard questionnaires are reviewed and modified prior to program launch in each country, to ensure questions are appropriate to each setting. Country-specific questions are also added that reflect programmatic priorities for stakeholders.

Survey content:

PMA surveys feature not only key family planning indicators but innovative measures related to key family planning concepts, such as the following:

- **Female survey:** The PMA female survey includes sociodemographic characteristics, measures of contraceptive use and change, along with key family planning indicators like unmet need and intent to use. Beyond these measures, PMA has also included numerous measurement innovations, such as three measures of women and girls' empowerment (economic, sexual, and reproductive), migration histories, transitions to adulthood among adolescents, and community norms related to family planning. PMA also administers a reproductive calendar that records contraceptive use and reproductive outcomes for the three previous years. Finally, of note, PMA was the first large-scale population-based survey that collected information on DMPA-SC and self-injection.
- **Household survey:** The main purpose of the PMA household survey is to list the members of the household and to measure household assets that are used to create a wealth index.
- **Client exit interview survey:** The PMA CEI survey instrument captures contraceptive use, awareness, and interest; quality of care provided, respectful care, comprehensive method education; general perceived satisfaction; and community perception of the facility.
- **SDP survey:** This survey includes measures of method availability, method stock-out, reasons for stock-outs, facility readiness for IUD & implant insertion/removal, and family planning client volume.



Covid-19 Pivot

As Covid-19 rapidly spread around the globe, there was an urgent need for timely, high-quality information on awareness of Covid-19, and the impact of and response to the pandemic. The response to Covid-19 required data, but at the same time, many data collection efforts had to be put on hold due to the pandemic.

Fortunately, PMA was well positioned to shed light on this public health emergency by collecting timely, high-quality data on Covid-19. We drew from our experience from [PMA Agile](#) and a comparison of remote data collection modes conducted in Burkina Faso to be the first population-based survey data on Covid-19- at a time of great need.

As one of the first steps, the PMA Covid-19 survey instrument was created in collaboration with PMA representatives in DRC, Kenya, Burkina Faso, and Nigeria, and the Ministries of Health in each country. The purpose of this was to ensure that the PMA Covid-19 data would be used by these governments for their Covid-19 response.

The focus of our Covid-19 survey instrument is on the most important epidemiological features of Covid-19, including: awareness of the pandemic; exposure to Covid-19 messages in the media; knowledge of symptoms and transmission modes; perceived risk of infection; behavior change resulting from Covid-19 (e.g., social distancing, work closure); economic impact of Covid-19 (impact on household income, woman's income, intra household economic dynamics); impact on health care seeking and access; and the impact on family planning (e.g., fertility intentions, access to family planning services, contraceptive use).

The PMA Covid-19 survey contacted women via telephone who participated in a baseline survey of PMA's longitudinal data collection, completed in December 2019/January 2020.

The 30-minute telephone survey collected data on the knowledge of Covid-19 and the impacts of this pandemic in the Democratic Republic of Congo (DRC), Kenya, Burkina Faso, and Nigeria. Similar questions on the impact of Covid-19 were then included in the subsequent panel round for all 8 countries, allowing PMA to track the impact of Covid-19 over time.

PMA's Covid-19 data had a great impact. PMA data were used by all countries to inform their response to the pandemic and were cited by government representatives and mentioned in multiple media outlets.

PMA's data and research shifted the dialogue about Covid-19. Early in the pandemic, many feared that Covid-19 would have a devastating impact on contraceptive use and unintended pregnancy. However, [multiple PMA publications](#) showed that family planning use did not decrease during Covid-19, as expected; and health facilities were generally able to rebound after a dip in contraceptive stock early in the pandemic. However, PMA data showed that Covid-19 did have a substantial impact on [household economic status](#).

Ultimately, PMA's data are the only source of high-level, nationally and/or sub-nationally representative data at various stages of the Covid-19 pandemic. This effort also highlighted PMA's flexible platform, in that we were able to rapidly adapt and collect data at a time when other data collection endeavors were put on hold. More information on PMA's Covid-19 data, research, and impact on programs [can be found here](#).

Connection with in-country policies and programs

A central goal of PMA is that our data are used to inform in-country policies and programs. For this, we have achieved a number of important accomplishments in all countries. Some highlights are below for each PMA country.

- The government of **Burkina Faso** integrated key results from PMA's family planning and nutrition surveys into their 2018, 2019, 2020, 2021, and 2022 statistical bulletins, allowing PMA data to be accessible to a number of actors and partners in-country who use the statistical bulletin for planning and monitoring progress for their interventions. The Burkina Ministry of Health used PMA data in setting the strategic plan for family planning from 2016 on. They also used the annual data to evaluate their progress towards their goals. This [video](#) from the Burkina Faso Minister of Health, Dr. Leonie Claudine Lougue, highlights the impact PMA data has had in her country: "Thanks to PMA, we were able to make up for the lack of data from our demographic and health survey, which is carried out every 5 years. It enabled us to adjust the priorities we had already laid out in terms of family planning, to evaluate and assess our family planning priorities and to develop our national plan for family planning."
- In **Uganda**, [Ministry of Health officials used PMA data](#) both to develop the FP CIP and to monitor progress. "The data collected in this PMA survey inform monitoring and assessment, assessing the progress of the targets as we set in the [Family Planning 2030 commitments](#) and the [costed implementation plan](#)... From the first PMA survey, we were seeing the country making progress, however slow it is, towards increasing modern contraceptive usage. As you all know the FP2030 objectives were launched and we need to be able to work. I will soon share with you the considerable plan, which is also a precursor for us to be able to achieve our Family Planning 2020," said Dr. Charles Olaro (Director Health Services at the [Ministry of Health](#)).
- In **Niger**, the Ministry of Public Health (MSP- Ministère de la Santé Publique) uses PMA data for annual performance monitoring of FP indicators (La programmation des activités du MSP PAP 2022; PAP=Projet Annuel de Performance). The MSP also used PMA data in the development of the 2022-2026 Economic And Social Development Plan (Le plan de développement économique et social (PDES 2022-2026)), as well as the UN sustainable development plan for Niger (le Programme Cadre Niger - système des nations Unies (2022-2025). This [article in the Sahel](#) highlights PMA Niger P1 findings and dissemination with some comments by ministry attendees.
 - At a Phase 2 dissemination event in March 2022, [Dr. Girish Dwedi, Project Director, Family Welfare, Govt. of Rajasthan](#) said, "The (PMA) data being released today are of great significance for the government. It will inform our policies and programs and help us to take data-driven decisions."
 - In July 2022, the Director General of Health in **Cote d'Ivoire**, Mamadou Samba, attended the PMA Phase 2 results dissemination event, and [stated that PMA provides critical information](#) that he uses to inform the planning of various FP programs.
 - The **DRC** was the only country to send three ministers (Health, Education and Planning, Development) to the Fourth International Conference on Family Planning in Indonesia in January 2016. In their various presentations during the conference, they repeatedly used data from PMA to explain the situation of the country and advocate for further multi-sectoral support to programming in this area. For example, at the ICFP in Indonesia, the DRC Minister of Health cited PMA data in [his video-recorded speech](#) to the plenary assembly.
 - PMA data on DMPA-SC were [presented and discussed](#) by the Nigerian Ministry of Health, Alliance for Family Planning, DKT International, John Snow, Inc, PATH, and PMA at a September 2018 Essential Medicine List (EML) group meeting in **Nigeria**, resulting in the inclusion of DMPA-SC in the EML in December 2018. This permits the private sector to access and provide DMPA-SC, and generally ensures a more sustainable procurement plan for the injectable.
 - In **Kenya**, PMA was officially recognized as a data source for the [Kenya Bureau of National Statistics \(KNBS\)](#). Official recognition means that government officials can cite PMA data without needing to get prior authorization since it is now an official data source; KNBS will host PMA data on their website; and KNBS will now hold periodic convenings to discuss the PMA data and its implications.

Below are some of PMA's recent impactful publications:

1

The predictive utility of unmet need and intention to use on contraceptive adoption: The predictive utility of the unmet contraceptive need indicator is not well known. This study was the first to compare unmet need with intention to use in predicting future contraceptive use. Using panel data from Uganda, the study found that unmet need underperforms in predicting future contraceptive adoption compared to contraceptive intentions; women with no unmet need but intending to use had the highest rate of adoption compared to those with no need and no intention.

Reference: Sarnak, D., Tsui, A., Makumbi, F., Kibira, S. P., & Ahmed, S. (2020). The predictive utility of unmet need on time to contraceptive adoption: a panel study of non-contracepting Ugandan women. *Contraception*: X, 2, 100022.

2

Conceptual framework for women and girl's empowerment in reproductive health: The paper provides a conceptual understanding of reproductive empowerment as a process starting with setting reproductive and contraceptive goals, exercising these choices, and achieving these goals. The empirical findings reflect the internal and external motivations guiding childbearing and contraceptive preferences and economic, and social barriers, including gender power dynamics limiting women's ability to exercise these preferences. Results can be used to guide novel research on barriers to reproductive empowerment.

Reference: Karp, C., Wood, S. N., Galadanci, H., Kibira, S. P. S., Makumbi, F., Omoluabi, E., ... & Moreau, C. (2020). 'I am the master key that opens and locks': Presentation and application of a conceptual framework for women's and girls' empowerment in reproductive health. *Social Science & Medicine*, 258, 113086.

3

Assessing the reliability of the contraceptive calendar: Although the reproductive calendar widely used for key FP measures, the reliability of calendar data has seldom been evaluated, primarily due to the lack of longitudinal panel data. We test the reliability of the calendar using PMA data from nine settings in seven countries. Overall, we find that the reliability of the calendar is in the “moderate/substantial” range for nearly all geographies. Measures of the complexity of the calendar (number of contraceptive use episodes, using long-acting method at baseline) are associated with reliability, and women who were using contraception covertly from their partners/husbands were less likely to report reliably in several countries.

Reference: Anglewicz, P., Sarnak, D., Gemmill, A., & Becker, S. (2023). Characteristics Associated with Reliability in Reporting of Contraceptive Use: Assessing the Reliability of the Contraceptive Calendar in Seven Countries. *Studies in family planning*, 54(1), 17-38.

4

Use of DMPA-SC and self-injection: Subcutaneous depot medroxyprogesterone acetate (DMPA-SC) is seen as a valuable innovation in family planning, but little is known about trends in DMPA-SC use or characteristics of users. Using data from Burkina Faso, the Democratic Republic of Congo (DRC), and Uganda, we measured trends in DMPA-SC and identified characteristics associated with DMPA-SC use. We found that DMPA-SC use increased monotonically in all three countries. Many DMPA-SC users were first-time users of modern contraception instead of switching from another method.

Reference: Anglewicz, P., Akilimali, P., Guiella, G., Kayembe, P., Kibira, S. P., Makumbi, F., ... & Radloff, S. (2019). Trends in subcutaneous depot medroxyprogesterone acetate (DMPA-SC) use in Burkina Faso, the Democratic Republic of Congo and Uganda. *Contraception*: X, 1, 100013.

5

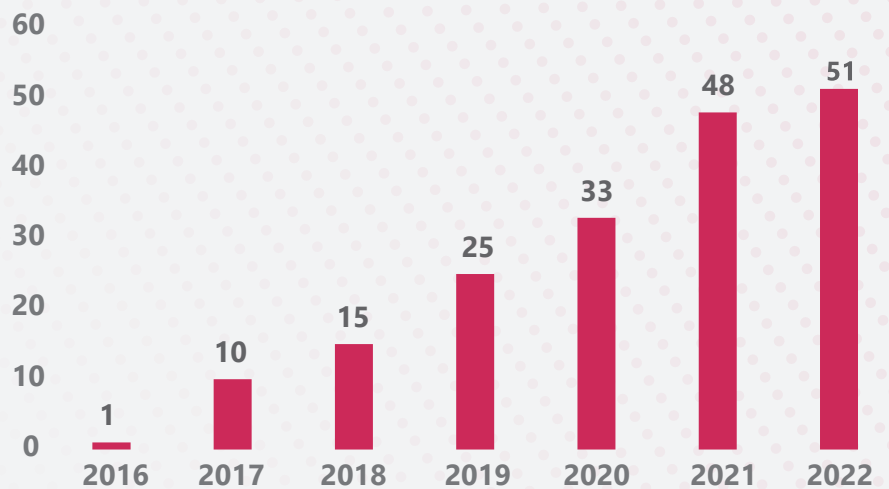
Inequities in the incidence and safety of abortion in Nigeria: The study contributed both methodologically and substantively to the abortion research landscape. Methodologically, results indicate the feasibility of using an indirect, social network-based approach to measure abortion incidence and safety at the population level, a health outcome that is prone to significant underreporting when measured directly on face-to-face surveys. Substantively, our findings reveal abortion is common in Nigeria despite legal restrictions, with a one-year rate of 46 abortions per 1,000 women of reproductive age. Disparities in women’s reliance on unsafe abortion in particular highlights this is a public health concern and an issue of social inequity.

Reference: Bell SO, Omoluabi E, OlaOlorun F, et al (2020). Inequities in the incidence and safety of abortion in Nigeria. *BMJ Global Health* 2020;5:e001814.

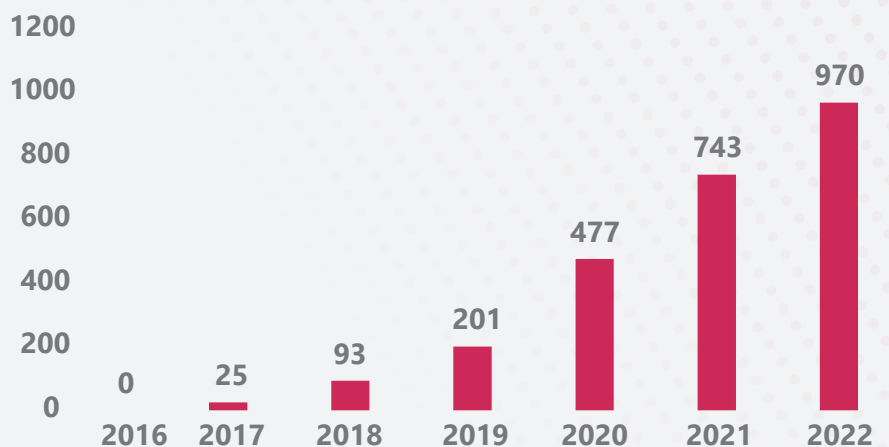
RESEARCH ACCOMPLISHMENTS:

With rare longitudinal panel data on contraceptive dynamics, PMA has become a leader in family planning research in recent years. Evidence of this is clear from the [PMA Google Scholar website](#), which lists all publications with PMA data and the citations for these papers over time. The number of publications produced with PMA data increased from 1 in 2016 to 33 in 2020, then peaking at 48 by 2022. Similarly, the number of references to these publications has increased from 0 in 2016 and 25 in 2017 to 970 by 2022. These increases are not just among US-based researchers: the number of publications led by an author from a PMA country has also increased steadily over time.

Number of Publications with PMA Data, by Year



Number of References of PMA Publications, by Year



INNOVATIONS

Building upon this novel design, PMA has continued innovating in numerous ways with modifications to design and content that advance our understanding of contraceptive use dynamics, as well other areas of public health. Listed below are examples of these innovations. The full list may be [found here](#).

- **[DMPA-SC and Self-Injection](#)**: PMA has been tracking use of DMPA-SC since its introduction in each PMA country, and has recently added measures of self-injection of DMPA-SC, along with knowledge of and attitudes towards DMPA-SC. Some of our recent work can be [found here](#).
- **[Women & Girls' Empowerment](#)**: Women & girls' empowerment is studied across all PMA countries, with a focus on sexual, reproductive, and economic empowerment. This started with a qualitative study that led to the development of several measures of these concepts, which are now incorporated into PMA panel data collection. Read the executive summary of this study [here](#) and the complete study [here](#).
- **[Abortion](#)**: Abortion modules introduced in six countries (Cote d'Ivoire, India, Nigeria, Burkina Faso, Niger, and DRC) demonstrate the value of encompassing a "confidante" measure that better estimates true abortion rates. Components have also been incorporated to better understand factors underlying decisions and methods used and to better understand medical abortion availability. [Briefs are available](#) from Cote d'Ivoire, India, Nigeria, Burkina Faso, Niger, and DRC.
- **[Gender-Based Violence](#)**: Given the potential for Covid-19 restrictions to increase gender-based violence (GBV),

countries could opt-in to a GBV mini-module beginning in 2020. The mini-module includes questions on prevalence and intensity of intimate partner violence (IPV) and household violence, as well as help-seeking behaviors. PMA Ethiopia additionally assesses IPV during pregnancy and YRDS examines IPV and non-partner sexual assault for urban adolescents.

- **[Reproductive Coercion](#)**: Reproductive coercion, a type of IPV where partners interfere in women's contraceptive use, is assessed across PMA, PMA Ethiopia, and YRDS. View our [survey results here](#).
- **[Implant Use and Removal](#)**: Implant use and removal questions are added to survey rounds in countries with high implant use at country's request. The questions encompass background characteristics of implant users, service readiness to remove implants, counseling on removal, and implant removal experience among women who have sought but not received a removal. Read the results from Ethiopia [here](#).
- **[Additional survey modules](#)**: Over our history, PMA has included survey modules on a range of other topics, such as menstrual hygiene management, water and sanitation/schistosomiasis, nutrition, primary health care, and more.

IMPACT OF PMA PARTNERSHIPS

In addition to the direct value of PMA data to policy makers and the research community, we take pride in the impact of our partnerships. Through the daily work of implementing PMA surveys together over nearly a decade, we have built strong relationships with academic and government partners in PMA countries. Over the course of the partnership, the majority of survey activities have been transferred from the central team at Hopkins to the individual implementing partner teams in country. Currently, the PMA implementing partners lead on fieldwork training and planning; data cleaning during fieldwork and creation of longitudinal linkages; cross-sectional survey weights generation; programming of country-specific ODK and brief generation- among other tasks. In addition to their considerable contributions on the research side, PMA partners are operationally equipped to take a platform like PMA into the future.

Finally, the great strength of the PMA project is the individuals who bring their energies and expertise to the project and, hopefully, take away some new skills and expertise as well. To that end, we have built platforms for knowledge exchange into the everyday workings of PMA. We conducted annual 'bootcamp' trainings for PMA employees in all countries- which focus on data manipulation, communication skills, and other key areas for

professional growth. We convene ongoing "goal clubs" where PMA employees from all countries meet regularly with a designated group leader to build skills in research, ODK programming, and data analysis. And we support multiple virtual platforms dedicated to knowledge exchange across partner countries. These collective resources allow for self-directed and self-paced learning and ensure that the people who work on PMA benefit from the wider community built through our work and our many partnerships.

We close this reflection on PMA by highlighting the voices and experiences of several of the resident enumerators, who are the face of the project to our respondents and our everyday ambassadors for PMA.

One feature that makes PMA unique is a cadre of highly-trained female data collectors (known as resident enumerators, or REs) who work in their own communities, thus establishing a rapport with female respondents that produces reliable information on sensitive topics, like abortion. REs are typically women over the age of 21 who are from or near the respective enumeration areas and hold at least a high school diploma. We've spoken with many REs over the years on the impact PMA has had on their lives. Here are a few of their stories. More RE stories may be found [here](#) and [here](#).



RE PERSPECTIVE: ROLE AND PROGRESS

Sharon Mfite Uwamahoro joined PMA Uganda as an RE in June 2016. She has since taken part in three different PMA studies.

The 35-year-old wife and mother of two boys aged 10 and 8 years recently got a job with Uganda Bureau of Statistics as a demographer in the Department of Population and Social Statistics - Directorate of Demography and Gender. Uwamahoro attributes her current achievement to the experience and exposure acquired during her five years with PMA.

“The first data collection I did with PMA was on the Schistosomiasis (Bilharzia) study in June 2016. The past five years as a Resident Enumerator (RE) have been a great opportunity of learning for me. There have been challenging times in the field but the experience I have received cannot be measured.

PMA REs are given an opportunity to be project managers in the enumeration areas they work in. With the guidance of a supervisor, you are accorded autonomy to carry out data collection independently. When you are in the field you know that the project’s success depends on you so you give it your best. This gave me self-reliance and confidence.

Through PMA I have also networked with so many valuable people both within PMA and in the field that I am taking on to the next season of my life. My communication skills have greatly improved through these interactions.

My time with PMA taught me to be patient and resilient. In the field, I faced a number of challenges like bad weather, poor roads and sometimes refusals from respondents. These felt like a challenge then but as a demographer now, I know I was being prepared well.”

RE PERSPECTIVE: ROLE AND PROGRESS

There is no force more powerful than a woman who is determined to rise. Pinky, born and brought up in Delhi, got married in her early years and started living in a small and sleepy town, Mahua. Though she was a graduate, she did not have a voice of her own in the family. She became timid and forgot about her studies and her dreams. She always wanted to study further. The environment in her family made her feel claustrophobic, and she decided to break free.

After joining PMA, she could start her studies again. Slowly and steadily, she decided to open a small coaching center for children with the money she earned from PMA. Initially, there were few children, but today the center is blooming. With the earnings from PMA, she could sustain a coaching center independently. She does not have to look upon others for her living. Today, she earns for the family.

Pinky has two children. Her husband does not do any work to support his family. During the lockdown, she had to go through hardships as there was no financial certainty. PMA was the only ray of hope for her. She knew that she would earn a certain amount from the organization, and she will be able to sustain her family. PMA gives her space to do other things as well. She gets enough time to study, look after the coaching center and take care of her children.

Pinky used to write poems during her school and college days. Today she is writing her own success story! She is living her dream.

Read other PMA India RE stories [here](#).





RE PERSPECTIVE: ROLE AND PROGRESS

Although family planning can be seen to be a common term known everywhere, it is not. I come from one of the marginalized communities in Kenya that harbor a lot of misconceptions about family planning.

Through training, I have gained in-depth knowledge on family planning and I now know the facts, advantages, and importance of family planning. I am also able to comfortably ask FP questions- a subject that is considered taboo in my community.

As I interact with the women, they have developed a lot of interest in knowing more about family planning and what options they have. Because of the good relationship I have developed with the health facilities in my community, I gladly refer them to the nearest facility where they get comprehensive FP information. When I return to these communities, I realize that the women are happy, contraceptive awareness has increased, and they are always thanking me for supporting them in their reproductive health journey. How I relate with the women from my community has improved and I can see light at the end of the tunnel. Without a doubt, information is power.

Cheruto – PMA Kenya

Read other PMA Kenya stories [here](#).



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