Family planning has widespread positive effects on health and wellbeing. Contraceptive use not only decreases unintended pregnancy and reduces infant and maternal mortality and morbidity, but it is critical to the achievement of Millennium Development Goals (MDGs). However, despite the expansion of family planning in many developing countries, contraceptive use remains critically low in much of sub-Saharan Africa and parts of South Asia, particularly among the urban poor. In cities in these regions, people living in poverty have limited access to family planning and other basic services; in many countries more than half of city residents live in urban slums that lack necessary amenities such as clean water, trash removal, and electricity. These urban environments provide an opportunity to target family planning interventions towards populations that have high unmet need for contraception through integrating family planning services into maternal, newborn, child health, and HIV/AIDS services, improving service quality, increasing private sector initiatives, and advocating for small family size.

The Bill & Melinda Gates Foundation created the Urban Reproductive Health Initiative (URHI) to promote innovative family planning programs in four countries: India (focusing on the state of Uttar Pradesh), Nigeria, Kenya, and Senegal. Targeting the urban poor, the URHI aims to develop cost-effective interventions that increase access to and demand for high quality family planning. To evaluate the impact of the URHI interventions, the Gates Foundation concurrently initiated the Measurement, Learning & Evaluation (MLE) Project for the URHI, an independent evaluation team that will conduct an impact assessment of the URHI programs. A key objective of the MLE project is to undertake a rigorous impact evaluation of the URHI country programs, identifying the most effective and cost-efficient programmatic approaches to improving contraceptive use among the urban poor. Specifically, the MLE project will evaluate the success of both demand-side URHI interventions (those that increase the desire for family planning services) and supply-side URHI interventions (those that increase the quality of and access to family planning services). The MLE project will also undertake a cost-effectiveness analysis of specific programmatic approaches, where feasible. This policy brief outlines the project’s hybrid study design and its intended impact.

Three Evaluation Design Elements

The MLE project evaluation comprises three design elements that allow researchers to measure programmatic impact across cities, over time, and among the urban poor and non-poor.

Impact Across Cities. The MLE project will take advantage of the delayed implementation of programmatic activities in some cities to develop a quasi-experimental design. In each country, researchers will evaluate four URHI-targeted cities that will receive immediate interventions and two cities that will receive URHI interventions during the third or fourth year of the project. This latter group of cities with delayed URHI interventions will serve as comparison cities. An assessment of these cities with the original set of intervention cities will add variation that will provide more precise measures of program impact.

This policy brief is based on the Technical Working Paper, “Study Design for the Measurement, Learning & Evaluation Project”
Impact Over Time. The MLE project will use a combination of repeated cross-sectional data (surveying a new representative sample of respondents at multiple points in time) and longitudinal data (surveying the same respondents at multiple points in time) in a hybrid study design. This hybrid approach maximizes the strengths of both types of data; rigorous cross-sectional surveys provide the attitudes and behaviors of a representative sample of the cities’ population at a given point in time, while longitudinal data measure the causal impact of program components on outcomes of interest. The project will also collect longitudinal data from a sample of health and family planning facilities that provide services to women and men – service delivery points (SDPs) – and examine access to and quality of family planning services at these facilities over the study period.

Impact Among the Urban Poor. To identify the impact of URHI interventions among the urban poor, the MLE project will structure the sampling of respondents to identify programmatic outcomes among both slum and non-slum populations.

Study Tools

Individual Surveys. The MLE project will conduct confidential surveys with women and men of reproductive age. Women and men will provide their basic demographic characteristics (such as age, ethnicity, family structure, and migration practices), their experience with family planning methods, their awareness of family planning messages, and their fertility desires. In addition, respondents will discuss their current health care experiences, including how they pay for health care and when and where they seek care for themselves and their children. At baseline, the women’s survey will also collect information on how to locate these women at mid-term and endline for follow-up surveys. This will permit an examination of how fertility desires and family planning behaviors change over time with increasing program activities and exposure.

SDP Surveys. MLE researchers will also collect data at a wide range of public and private SDPs. In facilities with licensed health care providers, the MLE team will conduct facility audits to determine the services that are provided at each location and the availability of family planning methods and prescription requirements. Fieldwork staff will conduct surveys with health care providers in these facilities to identify their training, standard operating procedures with clients, and referral mechanisms. In addition, the MLE team will conduct exit interviews with women who are leaving these facilities to evaluate satisfaction with health care services. Because family planning services are often available outside health care facilities, the MLE project will also collect data from local pharmacies and other retail outlets that offer contraceptives. In these locations, field workers will take an audit of available contraceptive methods, educational materials, and counseling opportunities, as well as identify the requirements women must meet to obtain a method and the cost of contraceptives.

Program Cost Analysis. Impact evaluations also provide an opportunity to determine the cost-effectiveness of different programmatic approaches to ensure that scarce resources are used most efficiently. To conduct these cost analyses, the MLE project will collect detailed information on program costs (including financial contributions and in-kind expenses) over the course of the project. Where possible, this information will contribute to an impact analysis that captures the cost of individual interventions.
Hybrid Study Design

Cross-Sectional Data. The MLE project will conduct cross-sectional surveys with women at two points in time – at baseline prior to the implementation of the URHI programs and at endline of the interventions, four years later. These data will allow the MLE team to determine if the overall contraceptive prevalence rate changes significantly in cities during this period. The MLE team will also collect cross-sectional surveys with men in intervention cities at baseline, mid-term, and endline of the project to measure men’s contraceptive attitudes and behaviors, gender attitudes, and identify any changes in men’s perspectives over time. Because these surveys are cross-sectional, baseline, mid-term, and endline respondents will differ and it will not be possible to attribute changes in knowledge, attitudes, and behaviors directly to program exposure at the individual level.

Cross-sectional data collection requires that researchers use an updated sampling frame to randomly select respondents at each survey round. A sampling frame is a snapshot of the entire population of a study area, in this case, each city, at a given point in time. With an accurate sampling frame, every adult in each city has the same chance of random selection into the study. Because urban populations are quite dynamic – urban migration can change the characteristics of cities quite rapidly – MLE researchers will identify, to the extent possible, updated sampling frames at baseline, mid-term, and endline. By randomly selecting respondents from these sampling frames, each cross-sectional survey will represent the entire population of men or women living in each city at the time of the survey. Thus, the MLE team will assess men’s family planning attitudes and behaviors at three points in time and the contraceptive prevalence rate of each city (calculated from the women’s cross-sectional surveys) at baseline and endline of the study.

Longitudinal Data. The MLE project will also collect longitudinal data from women and SDPs. Field workers will first conduct surveys with women and SDPs at baseline of the study, and then follow-up with the same women and SDPs at mid-term and endline. Because longitudinal data permit researchers to measure change over time, this study component will allow the MLE project to identify the causal impact of the URHI family planning interventions on women’s family planning attitudes and behaviors and also determine if URHI interventions activities improve the quality of family planning services in urban areas.

To maximize the significant resources required to collect both cross-sectional and longitudinal data, the women who are randomly selected as respondents to the baseline cross-sectional survey will become the participants in the longitudinal study. These women will receive follow-up surveys at mid-term and endline. Dovetailing the cross-sectional and longitudinal data collection conserves project resources and ensures that the longitudinal surveys with women represent the larger population of study cities at baseline (as researchers will randomly select these women from a current sampling frame).

One of the challenges of collecting longitudinal data is respondent attrition. Over time, individuals may move households or migrate to other cities or regions, limiting the ability of researchers to conduct follow-up surveys. To mitigate this, MLE researchers will collect detailed tracking information for each woman in the longitudinal survey. This information will include addresses and cell phone numbers for the respondent, as well as the names and contact information for her household members, community leaders, landlords, and friends. If a respondent changes residence before a follow-up survey, the MLE team will use this detailed tracking information to locate the respondent and determine the feasibility of conducting follow-up surveys at her new location.

The longitudinal component of the hybrid study design also includes data collection from a wide range of public and private SDPs. At baseline, MLE researchers will randomly select health care providers offering family planning services, pharmacies, and other retail outlets that offer contraceptives within each study city. Additionally, the sample will include all SDPs that respondents identify in the baseline survey as their preferred location for family planning services. Field workers will conduct follow-up surveys with the same SDPs at mid-term and endline. To track the location of the facilities, researchers will note the GPS coordinate of each SDP during the baseline survey and use this information to easily identify the same facilities upon return visits.
**Data Collection Plan**

The MLE project will use a comprehensive evaluation strategy that includes data collection at three time points (baseline, mid-term, and endline), each separated by two years. The MLE team will collect data with women and men using both longitudinal and cross-sectional samples.

At *baseline*, field workers will conduct the first cross-sectional surveys of women and men and the first longitudinal surveys with the SDPs. Respondents to the baseline cross-sectional survey of women will also become the respondents to the longitudinal survey of women; these respondents will receive follow-up surveys at the mid-term and endline.

At *mid-term*, researchers will survey a new, random sample of men for the second cross-sectional men’s survey. Field workers will also conduct follow-up surveys with the women interviewed for the baseline cross-sectional survey. These follow-up surveys with women constitute the longitudinal survey of women. Field workers will also conduct the mid-term surveys with the SDPs surveyed at baseline.

At *endline*, field workers will conduct follow-up longitudinal surveys with women and SDPs. The MLE research team will also survey a new, random sample of women and men for the endline cross-sectional surveys. These surveys will represent the larger population of each city at this point in time.

**Conclusion**

The MLE project is a quasi-experimental study that includes four intervention cities where the URHI will implement innovative family planning programming, and two comparison cities where programming is delayed in each URHI-supported country. The study design is a hybrid design that integrates cross-sectional and longitudinal data to assess the direct impact of innovative family planning programs and identify any change in the contraceptive prevalence rate and behavioral and attitudinal norms in intervention cities over the course of the URHI. To identify the specific reproductive health needs of the urban poor, the MLE project will structure the sampling of respondents to identify outcomes among both slum and non-slum populations. These design elements allow the MLE project to measure programmatic impact across cities, over time, and among the urban poor and non-poor.

Identifying the successes of family planning interventions – assessing supply-side programs that increase access to quality family planning and demand-side programs that change behaviors among individuals, households, and communities – requires that evaluation occur concurrently with programs. Because very few evaluations of family planning programs are conducted in this way, policymakers have few evidence-based recommendations to inform the allocation of scarce family planning resources. The MLE project will provide critical evidence-based findings to inform policymakers and improve the design of integrated family planning and reproductive health interventions that target the urban poor in South Asia and sub-Saharan Africa.

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**Data Collection Plan**

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<td>Endline</td>
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¹ Women in these surveys are the same
² SDPs in these surveys are the same

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