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# Frontier Health Markets (FHM) Engage

A WILLINGNESS-TO-PAY STUDY OF  
CONTRACEPTIVE USERS IN GHANA'S  
PRIVATE HEALTH SECTOR

Exploring Consumer Price Sensitivity for Oral  
Contraceptives and Injectables

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January 19, 2025

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### Exploring Consumer Price Sensitivity for Oral Contraceptives and Injectables

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**Acknowledgements:**

The cooperation and invaluable input from all the stakeholders engaged in the development of this report is acknowledged and appreciated.

**Cooperative Agreement No:**

7200AA21CA00027 (2021-2026)

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# Abbreviations

|            |  |
|------------|--|
| CV         | Contingent Valuation                               |
| DMPA-IM    | Depo-Provera                                       |
| FHM Engage | Frontier Health Markets Engage                     |
| FP         | Family Planning                                    |
| GDHS       | Ghana Demographic Health Survey                    |
| M4M        | Metrics for Management                             |
| OCP        | Oral Contraceptive Pill                            |
| OTCMS      | Over-the-Counter Medicine Seller                   |
| TFHO       | Total Family Health Organisation                   |
| USAID      | United States Agency for International Development |
| USD        | U.S. dollar  |
| WTP        | Willingness-to-Pay                                 |

# Executive Summary

In Ghana today, 38 percent of modern contraceptive users access family planning (FP) through private sector sources. The private sector is a significant source of several key contraceptive methods, including condoms, pills (OCPs), and injectables.

The United States Agency for International Development (USAID) and other donors have invested significantly in supporting Ghana's public and private sectors to increase access to and adoption of FP, recently focusing assistance on social marketing, supply chain management, and social and behavioral change communication. Despite these investments, most FP products and services in Ghana remain highly subsidized even as, globally, donor and government funding is shifting away from FP commodities. These trends threaten continuing growth in the number of modern FP method users but present an opportunity for more targeted use of subsidy to address affordability.

This study was conducted by FHM Engage to better understand the willingness of current contraceptive clients to pay more for two methods: OCPs and injectable contraceptives. This is crucial information for programs and donors, enabling pricing and funding strategies to be optimized more effectively. The study had two research questions:

1. What is the maximum amount current private sector users of OCPs and injectable contraceptives are willing to pay for their method?
2. What would clients do if their chosen method's price was higher than what they were willing to pay?

This study used a descriptive quantitative cross-sectional research design, employing a contingent valuation (CV) approach to assess current private health sector oral and injectable contraceptive users' willingness-to-pay (WTP) for their chosen methods. The study used a two-stage sampling approach, with purposive selection of eligible service delivery points in Accra and Tamale in Stage 1, and a take-all approach of all eligible clients in Stage 2, until a pre-determined sample size was reached in each facility. The study's analyses aimed to answer the two research questions by constructing demand and revenue curves for OCPs and injectable contraceptives and by examining what respondents would do if they discovered that their method had become more expensive than what they were willing to pay. All demand and revenue curve estimates adjust for their expected overestimation of their maximum willingness to pay.

The study recruited 350 private sector OCP users and 401 injectable clients. Among study participants, the aggregate median price paid by OCP users was 9 cedis, but revenue could be maximized at a retail price of 11.6 cedis. The modest potential price increase from 9 to 11.6 cedis, combined with price elasticity data — a metric that quantifies how responsive demand for a product is to price increases and whether price increases would potentially be met with small, modest, or large decreases in demand — derived from the OC demand curve, suggests that current private sector OCP consumers are sensitive to price changes. For injectables, the aggregate median visit price (which reflects both a service fee and a commodity fee, as applicable) paid by injectable users was 10 cedis, but respondents' survey responses suggest revenue would be maximized at a visit price of 29 cedis. The comparison between the median injectable visit price of 10 cedis and the revenue-maximizing price of 29 cedis suggests a significant opportunity for enhanced cost recovery.

When examining the Secure brand of OCPs as one of the most popular brands in the market, the study found that the median price paid was 6 cedis, but revenue could be maximized at 10.8 cedis. Although the estimated retail revenue-maximizing price of 10.8 cedis is lower than the 11.6 cedis observed in the aggregate OCP analyses, the difference between Secure's retail revenue-maximizing price and its current median price is greater than that of the aggregate OCP analyses — 4.8 cedis compared to 2.6 cedis. These analyses suggest that the Secure OCP brand has greater opportunity for price optimization and enhanced cost recovery compared to the overall private sector market for OCPs.

Next, the study examined what current private sector clients would do if they discovered that their method had become more expensive than what they were willing to pay. For OCP users, 19% reported that they would switch to a different method, 48% would go somewhere else to obtain the method, and 10% would stop using a contraceptive method altogether. For injectable users, 21% indicated they would switch to a different method, 35% would seek their method elsewhere, and 17% would discontinue using a contraceptive method.

Assuming that these study response patterns reflect national trends, if OCP retail prices were to increase to 11.6 cedis to reflect the suggested revenue maximization, we could expect around 4,000 current Ghanaian private sector OCP consumers no longer to use a contraceptive method and an additional 5,400 current private sector users to go to public sector facilities to obtain their method. For injectables, if injectable visit prices were to increase to 29 cedis — the revenue-maximizing visit price — we could expect around 6,600 current Ghanaian private sector injectable consumers to stop using a contraceptive method and an additional 1,500 individuals to shift to public sector facilities to obtain their method.

Ghana's private sector plays a critical role in meeting the FP needs of Ghanaians. As Ghana continues to experience economic growth and development, there is an opportunity to assess the role of the private sector strategically within the broader health market to ensure that it is contributing to the goal of universal health coverage. Optimizing private sector product pricing is an important step toward achieving private market sustainability. A robust private sector can expand healthcare coverage by providing services in areas where the public sector is under-resourced or absent, effectively helping to close gaps in service delivery. Additionally, by offering complementary services, the private sector reduces the burden on public healthcare facilities, enabling them to focus on priority populations and essential services. Ensuring that products are priced at or near cost recovery is essential to maintain and attract new investment of manufacturers, importers, distributors, and retailers along the contraceptive commodity value chain as donor subsidies decline.

This study contributes to our understanding of consumers' contraceptive commodity price sensitivity, an aspect of FP care that has remained understudied and mixed in its results. In this study of Ghanaian private sector OCP and injectable users, aggregate OCP analyses suggested that every one percent increase in price would result in a one percent decline in demand. While there appears to be an opportunity for all OCP brands to consider price increases, it is important to take care not to overshoot an optimum price point. The opportunity for increased cost recovery among Secure brand OCP users is slightly greater than the aggregate view. Perhaps the greatest opportunity for price recovery found by this study is in injectable contraceptives. With a maximum revenue visit price of 29 cedis, there is strong evidence that cost recovery through moderate commodity price increases is a feasible goal.

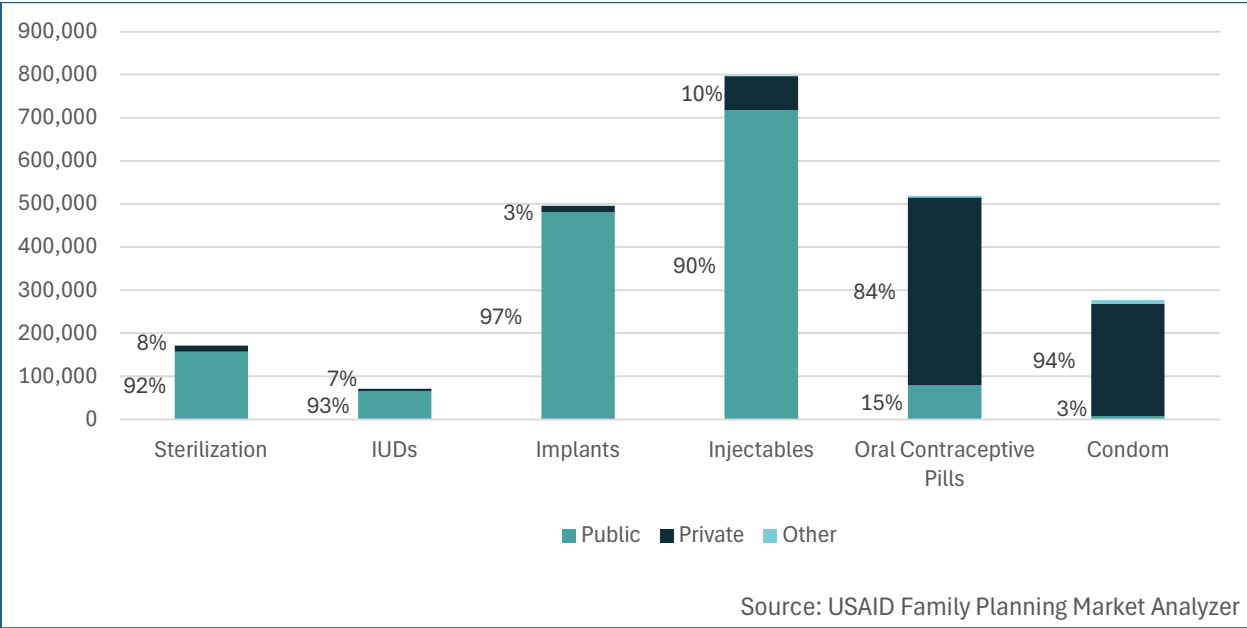
# Background

Family planning (FP), the ability of an individual or couple to plan desired family sizes, is an important component of healthcare for individuals, families, and society at large. Lack of access to FP information, products, and services undermines individuals’ health and lives and, in turn, can negatively impact social and economic development more broadly.<sup>1</sup>

Over the years, Ghana’s FP program has mainly emphasized expansion of FP services in the public sector, despite the incorporation of the private health sector into national FP policies and programs. However, evidence shows that 38% of modern contraceptive users access FP methods through private sector sources.<sup>2</sup> Private sector contraceptive users, though, are not evenly distributed across the country’s regions, wealth categories, or age groups. Women who obtain their contraception from the private sector tend to be more urban (47% of urban users vs. 31% rural), wealthier (57% of users in wealthiest quintile vs. 24% of users in poorest), and younger (60% of users under 19, 50% of users 20 to 24, and 34% of users over 25). Additionally, among private sector users, 84% report obtaining their method from pharmacies and shops, such as over-the-counter medicine sellers (OTCMSs).<sup>3,4</sup>

In Ghana, the private sector is an important source of several key contraceptive methods, including condoms, pills, and injectables (Figure 1).<sup>5</sup> This reflects the government’s policies for some contraceptive methods (e.g., condoms) and consumer preferences related to point of access for other methods (e.g., oral contraceptive pills [OCPs]). The complementary roles of Ghana’s public and private sectors for FP offers the Government of Ghana an opportunity to build a healthy overall FP market.

FIGURE 1: GHANA FP USERS BY METHOD AND SOURCE



The United States Agency for International Development (USAID), along with other donors, has invested significantly in developing Ghana’s public and private FP sectors, and, in recent years, has focused assistance on social marketing, supply chain management, and social and behavioral change communication. Despite these investments in strengthening Ghana’s FP market, most FP products and services remain highly subsidized with donor, non-governmental organization, or government funds.<sup>6</sup>

Globally, however, donor resources for FP are shrinking relative to current and expected demand growth. Due to limited government and donor resources and an increasing number of modern FP method users, countries must find alternative ways to increase sustainability and expand and optimize use of their financial resource bases. Governments, including the government of Ghana, are exploring ways to improve sustainability of the FP market, including improved efficiency of service delivery, reallocation of financial resources within institutions providing healthcare, better mobilization of partner institutions, and improved cost recovery.<sup>7</sup>

As a key intermediary and distributor of various donor-supported contraceptive methods, Total Family Health Organisation (TFHO) is evaluating its role in advancing the health and sustainability of Ghana's private sector family planning (FP) market. Currently, TFHO's contraceptive prices reflect donor subsidies. While subsidies make contraceptives more affordable for lower-income women, enabling access through private sector sources, they also impede cost recovery and sustain potentially unsustainable markets. This dynamic reduces incentives for businesses to optimize their distribution, marketing, and pricing strategies for these products. As a result, reliance on subsidies can undermine long-term market sustainability, jeopardizing access if the subsidies are withdrawn.

TFHO operates as both a market actor and a steward, bearing the responsibility of guiding the contraceptive care market toward greater sustainability. To fulfill this role, TFHO is actively assessing how changes in commodity pricing might impact demand and revenue. To achieve greater market sustainability, TFHO has set an ambitious goal of moving toward full cost recovery for its oral and injectable contraceptive methods. This report presents findings from a study that examines the effects of hypothetical price increases on demand and revenue for oral and injectable contraceptive methods. These insights aim to support evidence-based decision-making to achieve full cost recovery for these vital products while understanding the potential impact on private sector consumers.

## Study Goal

The overall goal of this study was to understand the willingness-to-pay (WTP) of current users of OCPs and injectable contraceptives in the Ghanaian private health sector to inform the public and private market decision-making of actors, including TFHO, around how to optimize pricing for these commodities, thereby identifying opportunities for increasing cost recovery and enhancing private sector sustainability. This study sought to answer two main research questions:

## Research Questions

1. What is the maximum amount current private sector users of OCPs, and injectable contraceptives would be willing to pay for their method?
2. What would clients do if their chosen method's price was higher than what they were willing to pay?

# Methods

## Research Design

This study used a descriptive quantitative cross-sectional research design, employing a contingent valuation (CV) WTP study approach to assess current private health sector OCP and injectable users' WTP for their chosen methods.

## Willingness-to-Pay Studies

WTP studies serve as a vital tool for gauging the monetary value that individuals assign to goods and services, particularly in contexts where market prices are either absent or difficult to determine. In the context of the private health sector, WTP studies can provide insights into how much users of contraceptives, like OCPs and injectables, are willing to pay, offering data for decision-makers aiming to optimize pricing strategies. This study employs a CV approach, a direct preference method that involves asking individuals hypothetical questions about their WTP for a particular good, thereby allowing researchers to estimate the economic value these individuals place on their chosen contraceptive methods.

Alternative direct estimation approaches for assessing WTP do exist and include methods such as price experiments and auction methods, in which individuals are required to pay for the product. It is important to note, though, that these alternative direct methods carry with them considerable ethical and logistical implications. Unlike price experiments, CV avoids market disruptions or access restrictions, which is critical given the sensitive nature of contraceptives and the financial vulnerability of many users. It also enables data collection from a broad and diverse population, capturing hypothetical WTP across various demographic and geographic groups with fewer logistical or financial constraints. Additionally, CV is cost-effective and culturally sensitive, as it does not require real monetary transactions or unfamiliar practices like auctions, fostering greater trust and participation among respondents.

Indirect hypothetical methods are another set of approaches available for assessing WTP. One example of an indirect preference method, conjoint analysis, explores how users value multiple product attributes, such as price, effectiveness, convenience, or side effects. By presenting realistic choice scenarios, conjoint analysis reveals the trade-offs users are willing to make, offering data for market segmentation and simulations of how changes in attributes might influence demand.<sup>8</sup> However, conjoint analyses are fairly resource-intensive to design, administer, and analyze, and may also be cognitively demanding for respondents. Since the focus of the first research question of this WTP study was to better understand price alone, CV appeared to the researchers to be a practical and straightforward approach.

While CV studies are effective in deriving WTP estimates, they are subject to certain limitations, such as hypothetical bias, where respondents may overstate their WTP since there are no actual financial consequences involved. A meta-analysis by Schmidt and Bijmolt suggests that the bias may overestimate WTP by 21%, which can be accounted for in subsequent analyses. The bias present in CV analysis is less than that from conjoint analytic methods.<sup>9</sup>

## Study Setting

The study was conducted in the Ghanaian cities of Accra, in the Greater Accra Region, and Tamale, in the Northern Region. These two settings reflect a broad range of the country’s socioeconomic backgrounds and, as two large population centers, offer large numbers of private sector clients and high-volume service delivery points. To capture WTP data from OCP users, data collection was conducted at pharmacies and OTCMSs. WTP data for injectable contraceptive users was collected from consumers at private clinic facilities with clinic staff licensed to administer intramuscular injectable contraceptives.

## Sampling Approach

This study employed a two-stage sampling approach, first purposively sampling high-volume facilities in Accra and Tamale, and then using a take-all approach at recruited study sites until the city level sample was achieved.

### Stage I: Selection of Service Delivery Points

In the first stage, the research team utilized Ghana's national health facility registry and organizational knowledge to identify high-volume service delivery sites in Accra and Tamale that sell OCPs, including TFHO-branded OCPs and injectables. High-volume sites were chosen to increase study efficiency. The purposive selection strategy ensured a geographically diverse representation, encompassing urban, suburban, and peri-urban areas within each city.

The research team conducted on-site visits to service delivery points from the initial list to identify locations that dispense TFHO contraceptive products, Secure (combined OCP-150mcg levonorgestrel/30mcg ethinyl estradiol) and Depo-Provera (DMPA-IM injectable), and sell five or more units of these products daily. While survey respondents were not required to use TFHO brands, the team ensured TFHO OCPs were available at all selected pharmacies and OTCMSs. Table 1 outlines the inclusion and exclusion criteria for service delivery points, with all inclusion criteria needing to be met for a site to be included in the study.

TABLE 1: STUDY SITE INCLUSION AND EXCLUSION CRITERIA BY SITE TYPE

| Screening Inclusion Criteria (Pharmacies & OTCMSs):  | Screening Exclusion Criteria (Pharmacies & OTCMSs):  |
|--|--|
| <ol style="list-style-type: none"> <li>Private service delivery site operated for profit or as a social franchise.</li> <li>Sells OCPs, including TFHO Secure brand OCPs.</li> <li>Located in the city of Accra or Tamale.</li> <li>Sells an average of five or more units of OCPs per day that it is open.</li> <li>The responsible authority of the facility is willing to participate.</li> </ol> | <ol style="list-style-type: none"> <li>Public service delivery site operated by the Ghana Health Service.</li> <li>Does not sell OCPs or does not sell TFHO Secure brand OCPs.</li> <li>Not located in the city of Accra or Tamale.</li> <li>Sells an average of less than five units of OCPs per day that it is open.</li> <li>The responsible authority of the facility is not willing to participate</li> </ol> |
| Screening Inclusion Criteria (Health Clinics):   | Screening Exclusion Criteria (Health Clinics):   |
| <ol style="list-style-type: none"> <li>Private service delivery site operated for profit</li> </ol>  | <ol style="list-style-type: none"> <li>Public service delivery site operated by the</li> </ol>   |

|   |  |
|---|--|
| or as a social franchise.   | Ghana Health Service.  |
| 2. Sells <i>and</i> administers injectable contraceptives.                              | 2. Does not administer any injectable contraceptives.                                      |
| 3. Located in the city of Accra <i>or</i> Tamale.                                       | 3. Not located in the city of Accra <i>or</i> Tamale.                                      |
| 4. Administers an average of five or more units of injectables per day that it is open. | 4. Administers an average of fewer than five units of injectables per day that it is open. |
| 5. The responsible authority of the facility is willing to participate.                 | 5. The responsible authority of the facility is not willing to participate.                |

OCP users were interviewed at the pharmacy and OTCMS service delivery points and injectable users were interviewed at private clinic sites. While some private sector OCP users obtain their method from clinics and some private sector injectable users obtain their commodity from pharmacies and OTCMSs, these user profiles form only a small segment of the private sector client base. The existing data highlights that a significant majority, around 80%, of all OCP users acquire their method from pharmacies and OTCMSs, in contrast to the less than 1% obtaining them from private hospitals and clinics. Further, around 8% of all injectable contraceptive users source their method from private healthcare facilities, with around 1% obtaining them from pharmacies and OTCMS.<sup>2</sup> Table 2 describes the distribution of service delivery points at which data was collected by facility type and region.

TABLE 2: SERVICE DELIVERY POINTS BY FACILITY TYPE AND REGION

| Facility Type                                | Accra | Tamale | Total |
|--|-------|--------|-------|
| <b>OCP user data collection sites</b>        |       |        |       |
| Pharmacies                                   | 4     | 4      | 8     |
| OTCMSs                                       | 3     | 5      | 8     |
| <b>Injectable user data collection sites</b> |       |        |       |
| Health centers/clinics                       | 7     | 7      | 14    |

## Stage 2: Selection of Clients for Study Participation

### Sample Size

The sample size for this study was estimated using the formula:

$$n = \frac{z^2(P)(1 - P)}{d^2}$$

where:

1.  $n$  is the required sample size.
2.  $P$  is the estimated proportion of the population with the characteristic being measured. For this study,  $P$  is defined as the proportion of respondents expected to be willing to pay at least 50%

more for their contraceptive method. Based on previous hormonal contraceptive method WTP research conducted in Ghana,  $P$  is set to 0.816 for OCPs and 0.8 for injectables.<sup>10</sup>

3.  $z$  is the value of the standard normal distribution at a 95% confidence interval (1.96).
4.  $d$  is the tolerable standard error, set at 0.0425.

Using this equation, the minimum sample size is 320 OCP users and 341 injectable users. This study assumed a 10% incomplete or internally inconsistent response rate, bringing the desired total sample to 352 OCP users and 375 injectable users. Table 3 illustrates the approximate desired geographic distribution of respondents.

TABLE 3: GEOGRAPHIC DISTRIBUTION OF RESPONDENTS

| Method & Facility Type  | Accra      | Tamale     | Method Total |
|-------------------------|------------|------------|--------------|
| <b>OCP users</b>        | <b>235</b> | <b>117</b> | <b>352</b>   |
| Pharmacies              | 94         | 47         |              |
| OTCMSs                  | 141        | 70         |              |
| <b>Injectable users</b> | <b>250</b> | <b>125</b> | <b>375</b>   |
| Health centers/clinics  | 250        | 125        |              |

The team aimed to enroll two-thirds of participants in Accra and the other one-third in Tamale. This distribution accounts for the significant population size disparity between Accra, a much larger metropolitan area, and Tamale. By prioritizing a higher number of participants in Accra, the researchers aimed to approach representation reflective of the population distribution.

## Recruitment Procedures

Respondent data were collected between April and July 2024. Within each city, the research team aimed to recruit roughly equal numbers of participants from each facility type. A take-all approach, including all eligible individuals within the study’s defined population and setting, was employed at the beginning of recruitment. Data collection was continuously monitored, and recruitment was discontinued at a site once it had reached its desired respondent quota. Each data collector was assigned to a specific site and either remained on-site all day or provided their phone number to front desk staff to be contacted when a potential study participant arrived. This approach was used to ensure data collection from a range of client profiles present at various times of the day. Table 4 outlines participant inclusion and exclusion criteria.

TABLE 4: PARTICIPANT INCLUSION AND EXCLUSION CRITERIA BY CONTRACEPTIVE TYPE

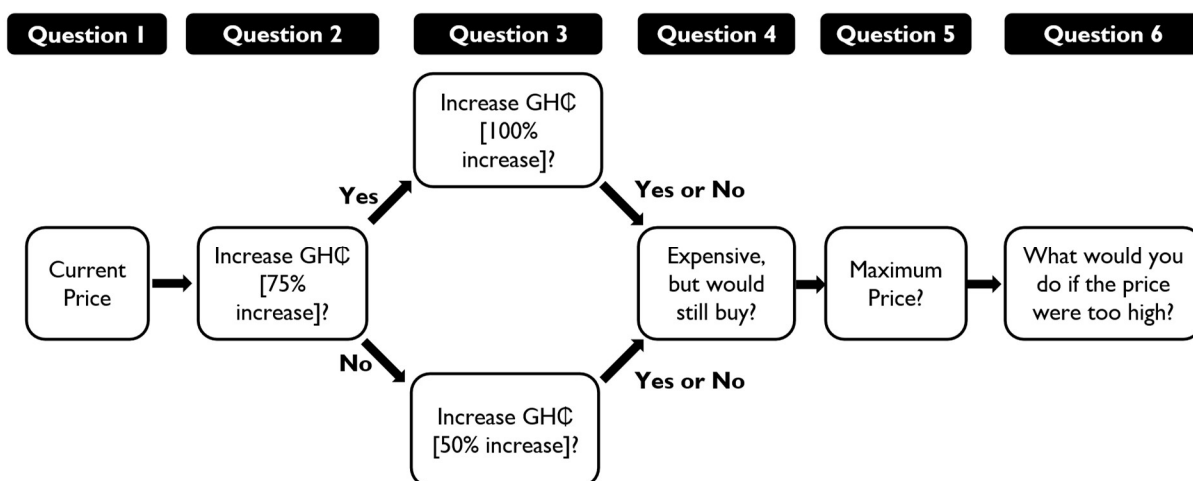
| Screening Inclusion Criteria (OCPs):  | Screening Exclusion Criteria (OCPs):   |
|---|--|
| <ol style="list-style-type: none"> <li>1. Women between the age of 15 and 49.</li> <li>2. Currently using an OCP.</li> <li>3. Has just come from purchasing OCPs from the service delivery point at which the data collector is stationed.</li> <li>4. Consents to being in the study.</li> </ol>                             | <ol style="list-style-type: none"> <li>1. Women under the age of 15 and over the age of 49.</li> <li>2. Did not purchase OCPs <i>or</i> identifies as an OCP user <i>but</i> purchased a different product at the time of recruitment.</li> <li>3. Does not consent to being in the study.</li> </ol>                                      |
| Screening Inclusion Criteria (Injectables):   | Screening Exclusion Criteria (Injectables):  |
| <ol style="list-style-type: none"> <li>1. Women between the age of 15 and 49.</li> <li>2. Currently uses injectable contraception.</li> <li>3. Has just obtained an injectable contraception from the service delivery point at which the data collector is stationed.</li> <li>4. Consents to being in the study.</li> </ol> | <ol style="list-style-type: none"> <li>1. Women under the age of 15 and over the age of 49.</li> <li>2. Not an injectable contraceptive user <i>or</i> identifies as an injectables contraceptive user <i>but</i> purchased a different product at the time of recruitment.</li> <li>3. Does not consent to being in the study.</li> </ol> |

## Questionnaire

The questionnaire was developed by the study team in collaboration with experts in the field using information from previous WTP studies and peer-reviewed literature. The instrument was also pilot tested to ensure validity and reliability of the questions before use in the main study. Data were collected using ODK Collect, a computer-assisted data collection system, which allowed for efficient, real-time data entry and transmission via mobile devices. A full copy of the questionnaire can be found in the Appendix.

Each respondent survey began by gathering demographic information, including age, marital status, number of children, educational level, and profession. Following this, a series of household asset ownership questions, derived from Metrics for Management’s (M4M’s) Ghana EquityTool,<sup>11</sup> were administered to estimate the relative wealth of the respondent’s household in comparison to national or urban populations. Participants were then asked about the type of contraception obtained during the visit. Data collectors also inquired about the specific source of funds used to purchase the contraceptive product. The core of the survey focused on eliciting participants’ WTP for their chosen contraceptive method. Employing a question algorithm informed by the CV approach to WTP studies (Figure 2), data collectors incrementally increased the amount, gauging respondents’ WTP more. Open-ended questions were then asked to ascertain the maximum amount participants were willing to pay.

FIGURE 2: MAXIMUM WTP QUESTION ALGORITHM



For the WTP algorithm, the data collector began by asking the respondent how much they paid for their method. For OCPs, this was the price of the product itself, while for injectables this was the total cost of the service, inclusive of the commodity price and any service fees. Starting from this price point, the electronic questionnaire, programmed on ODK Collect, automatically calculated the next price point as per the algorithm in Figure 2. Following the price increase questions, the data collector then asked the respondent a series of questions about what they would do if they found that their chosen method’s price was higher than what they were willing to pay.

The survey concluded with a debriefing, affording participants an opportunity to seek clarification or pose any questions they may have had.

## Data Analysis

The aim of the study’s analysis was to construct demand and revenue curves for OCPs and injectable contraceptives and to examine what respondents would do if they discovered that their method had become more expensive than what they were willing to pay.

## Data Cleaning and Preparation

While most brands of OCPs on the Ghanaian private sector health market are sold in packs containing three cycles (where one cycle is 28 pills), OTCMSs and pharmacies often break packs open to sell individual cycles for less than the price of a full pack. To account for varying number of cycles available for purchase, prices paid by respondents for fractional packs of OCPs were converted into three cycle pack-equivalents, enabling consistent comparisons between those purchasing full packs and those buying individual cycles. For example, the price paid for one cycle (1/3 of a pack) was multiplied by three to calculate a pack-equivalent price. Throughout these analyses, a “pack” refers to three cycles of OCPs.

To address outliers in maximum WTP, any reported prices exceeding 100 cedis were top coded at this level. For instance, a maximum WTP response of 150 cedis would be re-coded to 100 cedis. Finally, to account for an expected overestimation of WTP by respondents, all maximum WTP values were adjusted downward by 21% based on meta-analytical findings to provide more accurate estimates.<sup>9</sup> These adjusted figures were used to generate the demand and revenue curves included in this analysis.

## Constructing Demand and Revenue Curves

Price data for each method were aggregated across geographies and service sites to produce a single demand and revenue curve. A demand curve shows the quantity of a product that would be purchased at different price points, constructed by arranging potential customers' WTP responses in descending order. A revenue curve shows the total revenue generated at each price point by multiplying the price by the quantity demanded (number of customers willing to pay that price or more). A revenue curve typically has an inverted U-shape, with the peak representing the optimal price point for maximizing revenue.

To construct demand curves, the team conducted a frequency distribution of the maximum price individuals are willing to pay. This distribution allowed us to determine the price increments that are depicted along the x-axis of each demand curve. On the y-axis, the percentage of respondents willing to accept a given price was calculated as 100 minus the percentage of those whose maximum price falls below that price point.

To construct the revenue curve from demand curve data, we began by calculating the total revenue at each price point on the demand curve. For each price point, we multiplied the price by the corresponding quantity demanded to obtain the total revenue. Given the limited sample size, we applied Lowess smoothing to the revenue curves to reduce the influence of outliers and produce a smooth, readable, revenue curve. The subgroup analyses presented in this report are descriptive only, as this study is not statistically powered for these sub-analyses.

To estimate consumers' responses to price changes we examined each method's price elasticity of demand. Price elasticity of demand measures the change in demand for a product as a result of a change in its price. If a price change results in a large shift in demand (an absolute elasticity value of  $>1$ ), the demand is considered elastic. When demand is elastic, it means that the quantity demanded is highly responsive to changes in price. Conversely, if a price change causes only a small change in demand (an absolute elasticity value of  $<1$ ), the demand is inelastic. When demand is inelastic, it means that the quantity demanded is less responsive to changes in price. To measure price elasticity, we applied the following formula.

$$\text{Price Elasticity of Demand} = \frac{Q_2 - Q_1 / Q_1}{P_2 - P_1 / P_1}$$

where:

1.  $Q_1$  and  $Q_2$  are the initial and new quantities demanded.
2.  $P_1$  and  $P_2$  are the initial and new prices.

## Examining Clients' Alternatives to Paying More

To explore how respondents might react if their contraceptive method became more expensive than they were willing to pay, we analyzed responses to questions about their likely first course of action. Given that this information can provide insights into how price changes might influence unmet need and public health service utilization, we combined these responses with national population estimates of Ghanaian private sector contraceptive users from M4M's [Contraceptive Market Size Visualizer](#). This allowed us to estimate at a national level how many women might stop using a contraceptive method and how many might switch to public sector services if each method's price was increased to its revenue-maximizing price point.

# Ethical Approval

Ethical approval for this study was obtained from the Ghana Health Service Ethics Review Committee (review no. GHS-ERC 003/02/24). All procedures performed in this research were in accordance with the ethical standards outlined by the committee, ensuring the safety, confidentiality, and informed consent of all participants involved.

# Results

The study recruited 350 private sector OCP users, or 99% of the desired sample. Around two-thirds of those recruited lived in the Accra municipal area of the Greater Accra Region, with the remaining one-third in Tamale in the Northern Region (Table 5). Nearly 44% of participants were recruited from pharmacies, while the remaining 56% were recruited from OTCMSs. When examining OCP users by the brand that they purchased on the day of interview, we found that 60% of respondents had bought Secure-brand OCPs, about 38% had bought Lydia-brand pills, and the remaining approximately 2% of respondents had purchased either Microgynon or another brand of OCPs (Table 6).

TABLE 5: OCP USERS BY REGION AND SERVICE DELIVERY SITE

| Facility Type | Respondents<br><i>n</i> (% total) |
|---------------|-----------------------------------|
| <b>Accra</b>  |                                   |
| Pharmacies    | 122 (34.8%)                       |
| OTCMSs        | 111 (31.8%)                       |
| <b>Tamale</b> |                                   |
| Pharmacies    | 31 (8.8%)                         |
| OTCMSs        | 86 (24.6%)                        |
| <b>Total</b>  | <b>350</b>                        |

TABLE 6: OCP USERS BY BRAND

| OCP brand    | Respondents<br>n (% total) |
|--------------|----------------------------|
| Secure       | 210 (60%)                  |
| Lydia        | 134 (38.2%)                |
| Microgynon   | 3 (0.9%)                   |
| Other        | 3 (0.9%)                   |
| <b>Total</b> | <b>350</b>                 |

For injectable contraceptive methods, 401 private sector clients were recruited, 107% of the desired sample size. Similar to OCP users, two-thirds were recruited in Accra and the remaining one-third in Tamale (Table 7). Four respondents were excluded from WTP analyses for having used their National Health Insurance card to pay for all or part of their contraceptive care visit.

TABLE 7: INJECTABLE USERS BY REGION

| Facility Type | Respondents<br>n (% total) |
|---------------|----------------------------|
| Accra         | 251 (62.6%)                |
| Tamale        | 150 (37.4%)                |
| <b>Total</b>  | <b>401</b>                 |

## Study Demographics

In Table 8, study demographics are compared to urban-dwelling private sector OCP and injectable user respondents from the 2022 Ghana Demographic Health Survey (GDHS).<sup>2</sup>

TABLE 8: STUDY RESPONDENT DEMOGRAPHIC PROFILES COMPARED TO 2022 GDHS PRIVATE SECTOR CONTRACEPTIVE COMMODITY CLIENTS

|            | OCP users<br>n = 350 | 2022 GDHS<br>OCP users <sup>†</sup><br>n = 208 | Injectable users<br>n = 401 | 2022 GDHS<br>injectable users <sup>†</sup><br>n = 38 |       |
|------------|----------------------|--|-----------------------------|--|-------|
| <b>Age</b> |                      |  |                             |  |       |
|            | 18-24                | 32.8%  | 23.6%                       | 26%  | 21.1% |
|            | 25-29                | 26.9%  | 23.1%                       | 27.2%  | 34.2% |
|            | 30-34                | 19.7%  | 21.6%                       | 23.4%  | 21.1% |

|                                  | OCP users<br>n = 350 | 2022 GDHS<br>OCP users <sup>†</sup><br>n = 208 | Injectable users<br>n = 401 | 2022 GDHS<br>injectable users <sup>†</sup><br>n = 38 |
|----------------------------------|----------------------|--|-----------------------------|--|
| ≥ 35                             | 25.6%                | 31.7%  | 23.4%                       | 24.6%  |
| <b>Marital status</b>            |                      |  |                             |  |
| Married/in union                 | 38%                  | 66.8%  | 56.1%                       | 68.4%  |
| Widowed, separated,<br>divorced  | 4.9%                 | 7.7%   | 2.7%                        | 5.3%   |
| Never married                    | 57.1%                | 25.5%  | 41.2%                       | 26.3%  |
| <b>Highest educational level</b> |                      |  |                             |  |
| None                             | 1.6%                 | 13%  | 6.7%                        | 10.5%  |
| Primary                          | 23.5%                | 13.4%  | 38.4%                       | 13.2%  |
| Secondary                        | 57.6%                | 57.7%  | 38.7%                       | 68.4%  |
| Higher                           | 17.3%                | 15.9%  | 16.2%                       | 7.9%   |
| <b>No. of children</b>           |                      |  |                             |  |
| None                             | 54.3%                | 21.1%  | 21.4%                       | 15.8%  |
| One                              | 13.4%                | 14.9%  | 20.5%                       | 18.4%  |
| Two                              | 15.4%                | 20.7%  | 25.2%                       | 26.3%  |
| ≥ Three                          | 16.9%                | 43.3%  | 32.9%                       | 39.5%  |
| <b>Relative wealth*</b>          |                      |  |                             |  |
| Poorest                          | 1.1%                 | 23.6%  | 4.7%                        | 23.7%  |
| Poorer                           | 5.1%                 | 25.5%  | 13.5%                       | 28.9%  |
| Middle                           | 10.9%                | 24%  | 16.7%                       | 21%  |
| Richer                           | 16.6%                | 18.3%  | 23.2%                       | 13.2%  |
| Richest                          | 66.3%                | 8.6%   | 41.9%                       | 13.2%  |

<sup>†</sup>Urban-dwelling 2022 GDHS respondents who reported having last obtained their contraceptive method (OCP or injectable) from a private health sector facility.

\* Urban-only wealth index

For OCPs and injectables users, study participants tended to be younger and more frequently report never married compared to 2022 GDHS respondents. In terms of education, 57% of both OCP study users and 2022 GDHS users reported having a secondary school education. About 39% percent of injectable study users reported having a secondary school education, while nearly 70% of 2022 GDHS injectable users reported having attained a similar educational level. Over half of all OCP study users reported having no children, while this was the case for only approximately 21% of 2022 GDHS OCP users. Trends in number of children among injectable users in this study and 2022 GDHS users were more comparable, with 21.4% and 15.8% respectively not having any children. Finally, for relative wealth, both OCP and injectable study users belonged mostly to the top three wealth quintiles (93.8% of OCP users and 81.8% injectable users). In contrast, 2022 GDHS respondents were more evenly distributed across all five wealth quintiles, with 50.9% of OCP users and 47.4% of injectables users belonging to the top three wealth quintiles.

There are several reasons for the disparities in demographics seen between study participants and 2022 GDHS respondents. First, study participants were recruited largely from highly urban service delivery points, oftentimes near large universities. Additionally, while respondents from the 2022 GDHS are all considered urban residents, they are likely still being drawn from regions of that country that are less urbanized than study participants, meaning that they are less likely to be wealthy. These recruitment and geographic differences help explain why study participants tended to be younger, more educated, and wealthier than GDHS respondents. The proximity to universities likely contributed to the higher proportion of nulliparous and unmarried participants in the study, while the highly urban locations of recruitment sites helps explain why study participants were concentrated in the upper wealth quintiles.

## **Research Question 1: *What is the maximum amount current private sector users of OCPs and injectable contraceptives are willing to pay for their method?***

### **OCPs Analyses**

We begin our analyses of respondents' WTP for their OCPs by examining the prices they reported paying on the day of the interview. Across all OCP users, the median price paid for a pack of OCPs was 9 cedis. In Figure 3, which compares price distributions across the two study sites, we observe that the median price paid for OCPs in Accra was 6 cedis, while in Tamale, the median price was 3 cedis higher. When comparing the two facility types where OCP data were collected (Figure 4), we find that the median price paid by pharmacy clients was 6 cedis, while the median price paid at OTCMSs was 9 cedis.

FIGURE 3: AMOUNT PAID BY STUDY RESPONDENTS FOR OCPS, PER PACK BY REGION

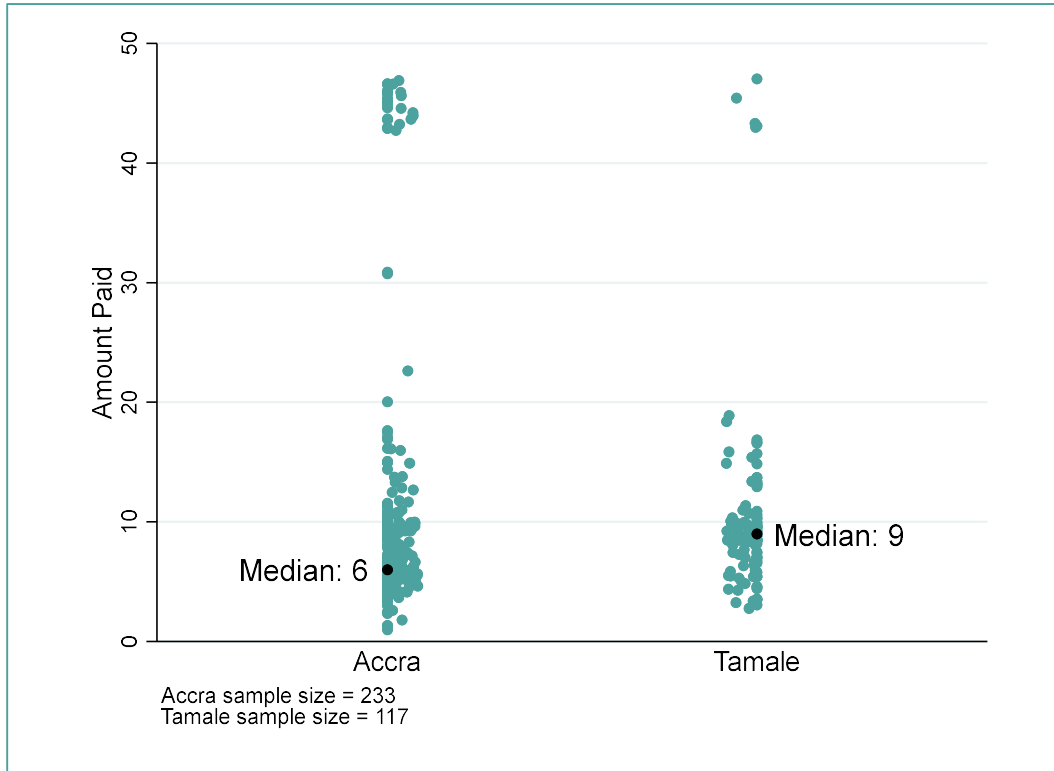


FIGURE 4: AMOUNT PAID BY STUDY RESPONDENTS FOR OCPS, PER PACK BY FACILITY TYPE

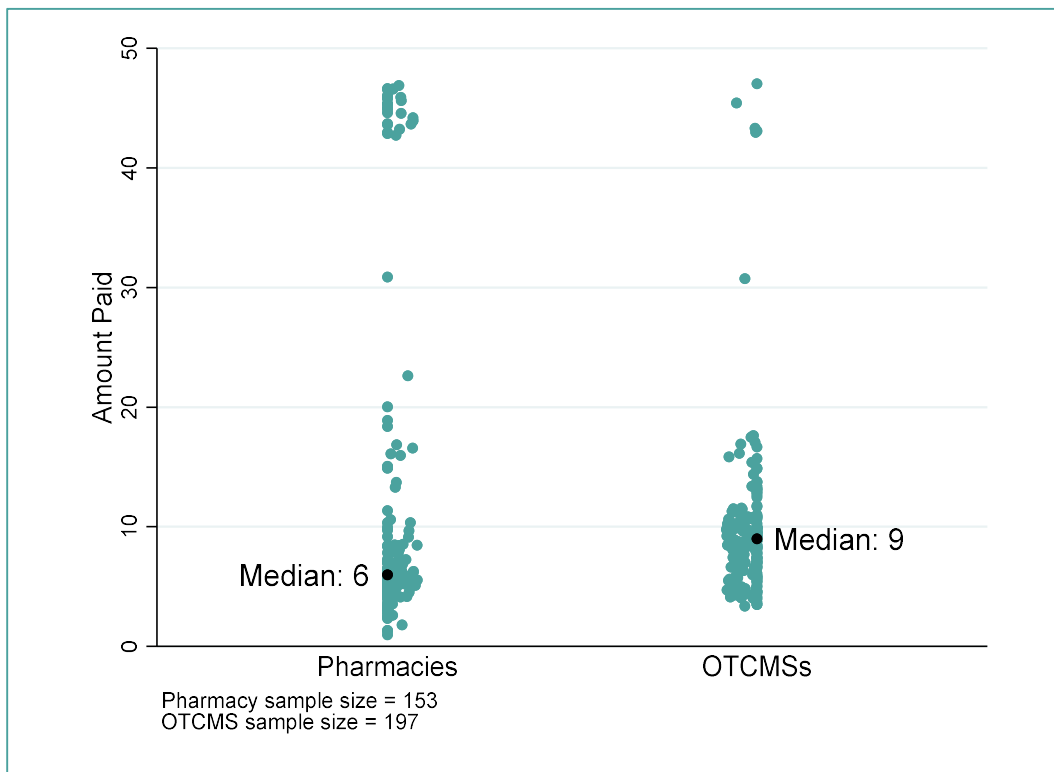
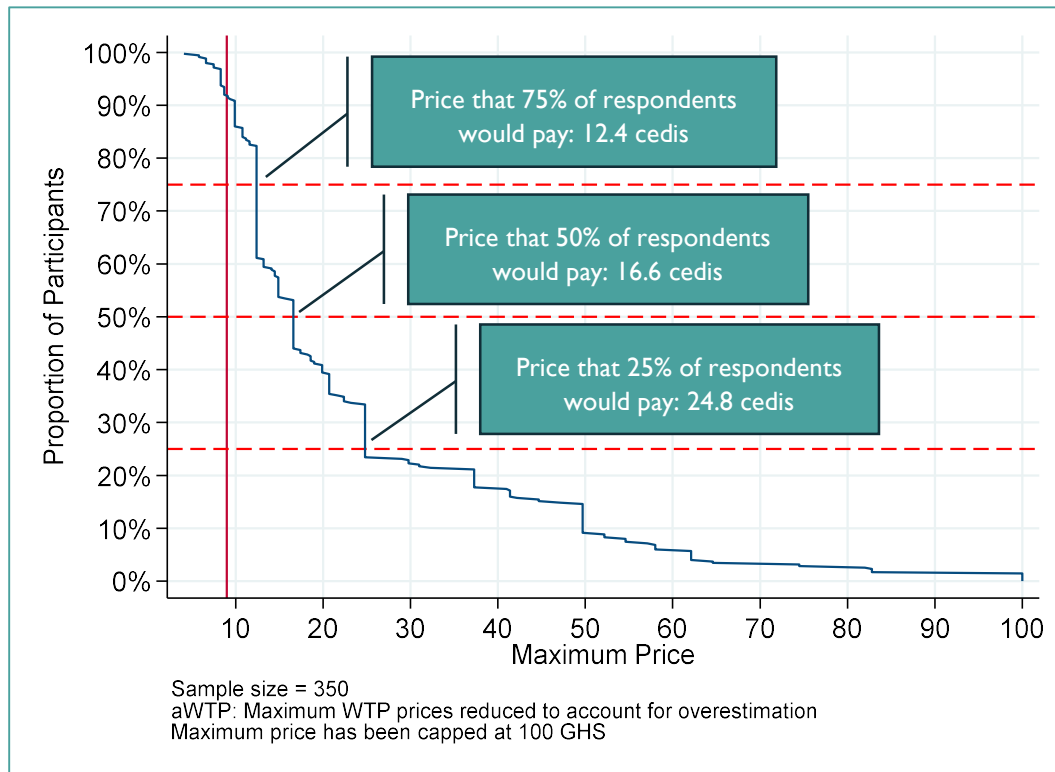


Figure 5 presents the WTP demand curve for OCPs, adjusted (reduced estimates by 21%) to account for overestimation bias in hypothetical studies. The red vertical line marks the median pack price of 9 cedis paid by study respondents. From the curve, we observe that 75% of respondents would be willing to pay 12.4 cedis for their method, 50% would be willing to pay 16.6 cedis, and 25% would be willing to pay 24.8 cedis. To further understand the effect of price on demand, we will examine the product's price elasticity of demand.

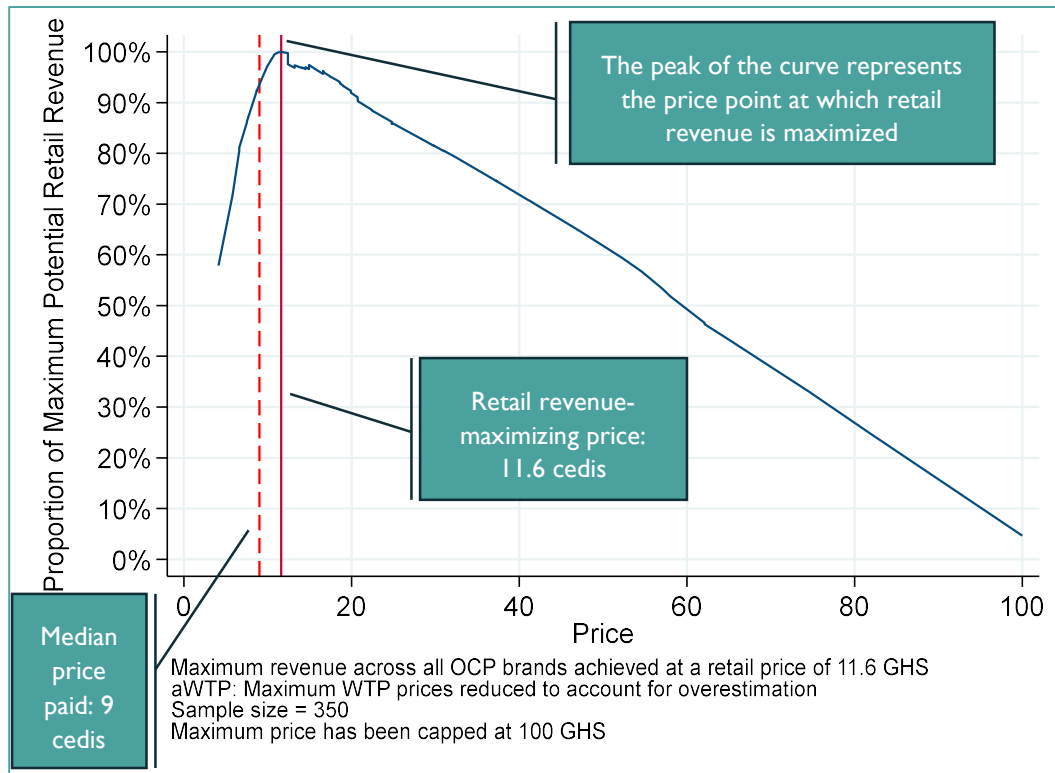
FIGURE 5: AGGREGATE ADJUSTED WTP OCP DEMAND CURVE



Price elasticity for OCPs changes insignificantly over the demand curve, remaining just under or just over 1 across all price points. This would suggest that any potential price increase would be offset by a proportional decrease in the quantity demanded. Given this near-perfect responsiveness to price changes, there may be limited potential for revenue optimization through price adjustments.

Figure 6 illustrates the aggregate adjusted OCP revenue curve, used to identify the point at which revenue could be maximized. The red dotted vertical line represents the median pack price paid by consumers for OCPs, 9 cedis. Next to it, the solid red vertical line that intersects the revenue curve at its apex marks the price point on the curve where retail revenue could be maximized, at 11.6 cedis, a price that, according to the demand curve, approximately 85% of current private sector OCP users in these geographic areas may be willing to pay.

FIGURE 6: AGGREGATE ADJUSTED OCP REVENUE CURVE

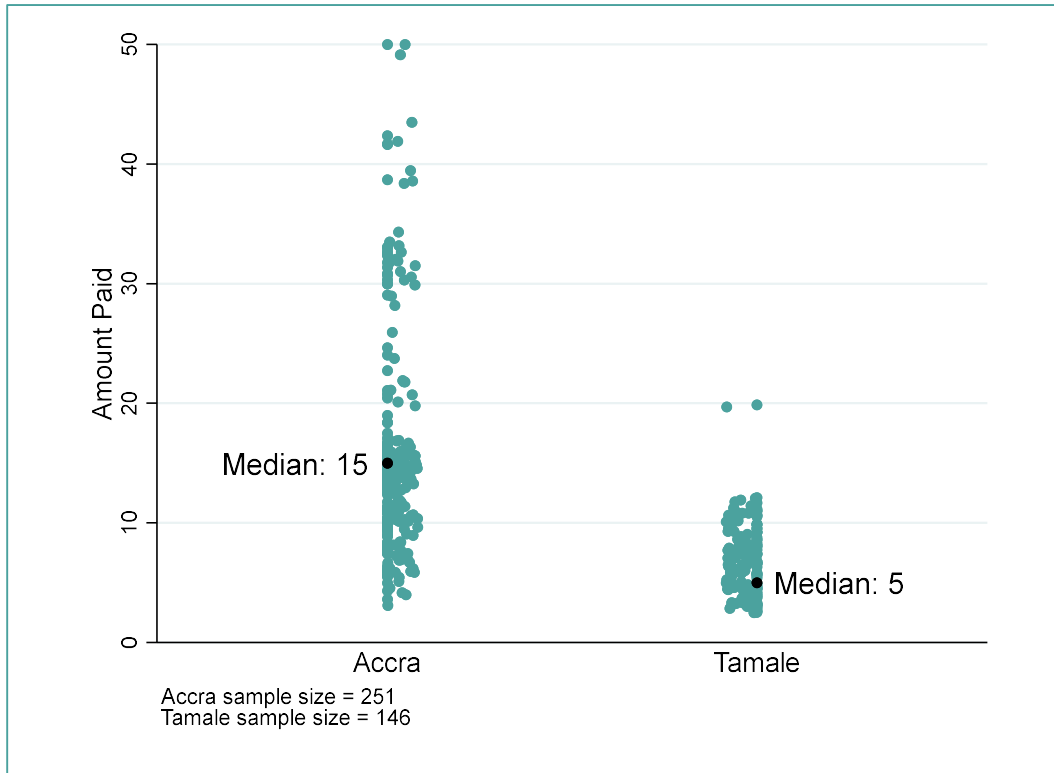


This modest potential price increase from 9 to 11.6 cedis aligns with the earlier observation from the demand curve that current private sector OCP consumers are sensitive to price changes. While bearing in mind that retail revenue maximization may not be a strategic priority and that retail prices include markups from distribution prices, these data suggest that caution is needed when considering price increases aimed at achieving greater OCP commodity cost recovery.

## Injectable Contraceptives Analyses

Next, we analyze the aggregate WTP among private sector injectable contraceptive users, focusing on the total price paid for their visit, which included the contraceptive, facility/service fee, and any additional charges at the time of the visit. On average, users paid 10 cedis. However, Figure 7 shows that in Accra, the average was 15 cedis, while in Tamale, it was 5 cedis. Price variation was also greater in Accra than in Tamale.

FIGURE 7: AMOUNT PAID FOR INJECTABLE CONTRACEPTION BY REGION



The study also explored whether women paid more when asked to obtain additional services, such as pregnancy or HIV tests, before receiving their injectable contraceptive. Figure 8 shows that the median price paid was similar for both groups, at 10 cedis. Table 9 indicates that slightly more users in Tamale (42%) were asked to obtain additional services compared to Accra (34%).

FIGURE 8: AMOUNT PAID FOR INJECTABLE CONTRACEPTION BY WHETHER RESPONDENTS RECEIVED ANY OTHER TESTS OF SERVICES

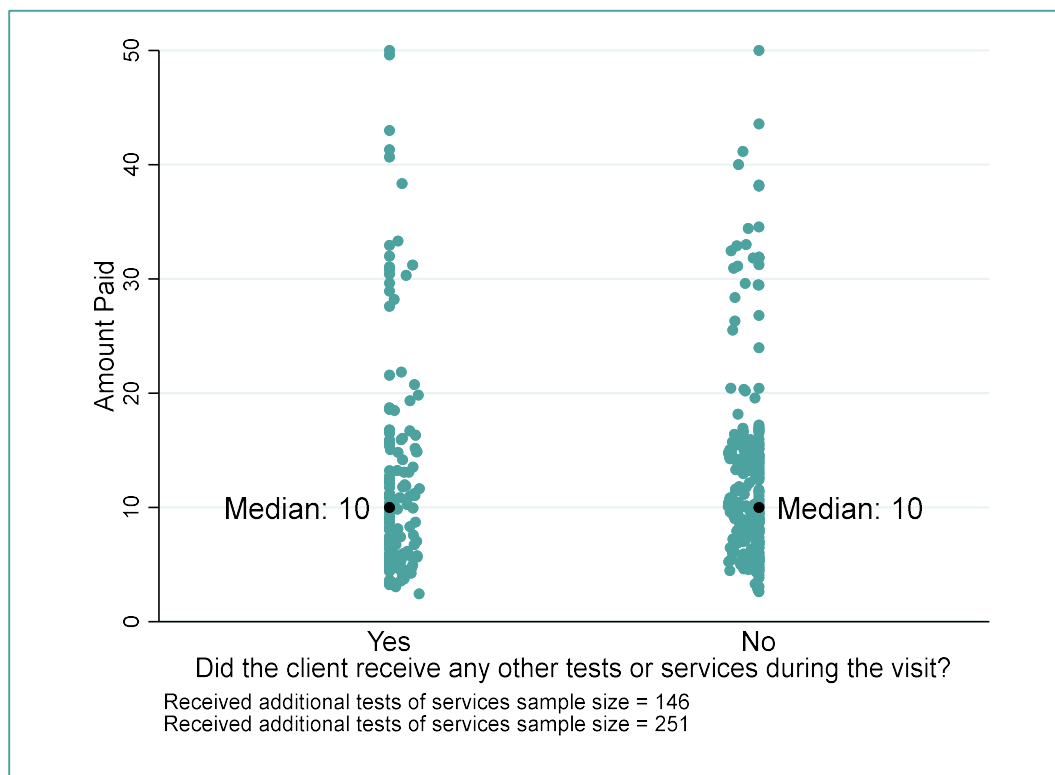


TABLE 9: PROPORTION OF INJECTABLE CONTRACEPTIVE RESPONDENTS ASKED TO RECEIVE ADDITIONAL TESTS OR SERVICES DURING THEIR VISIT

|        | Yes<br>n = 146 | No<br>n = 251 |
|--------|----------------|---------------|
| Accra  | 34%            | 66%           |
| Tamale | 42%            | 58%           |

Figure 9 presents the aggregate WTP demand curve for injectable contraceptives. From the curve, we observe that 75% of respondents would be willing to pay 16.6 cedis for the method, 50% would be willing to pay 24.8 cedis, and 25% would be willing to pay 41.4 cedis. Between the 75% and 50% price points, the price elasticity of demand is approximately 0.67, while between the 50% and 25% price points it is 0.75. These price elasticities well below 1 suggest that the demand for injectables is relatively inelastic and price increases would not be met with offsetting decreases in demand. Given that private sector injectable users are less sensitive to changes in price for their method, there is greater opportunity for cost recovery for injectable contraceptives in Accra and Tamale than there is for OCPs.

FIGURE 9: AGGREGATE ADJUSTED WTP INJECTABLE DEMAND CURVE

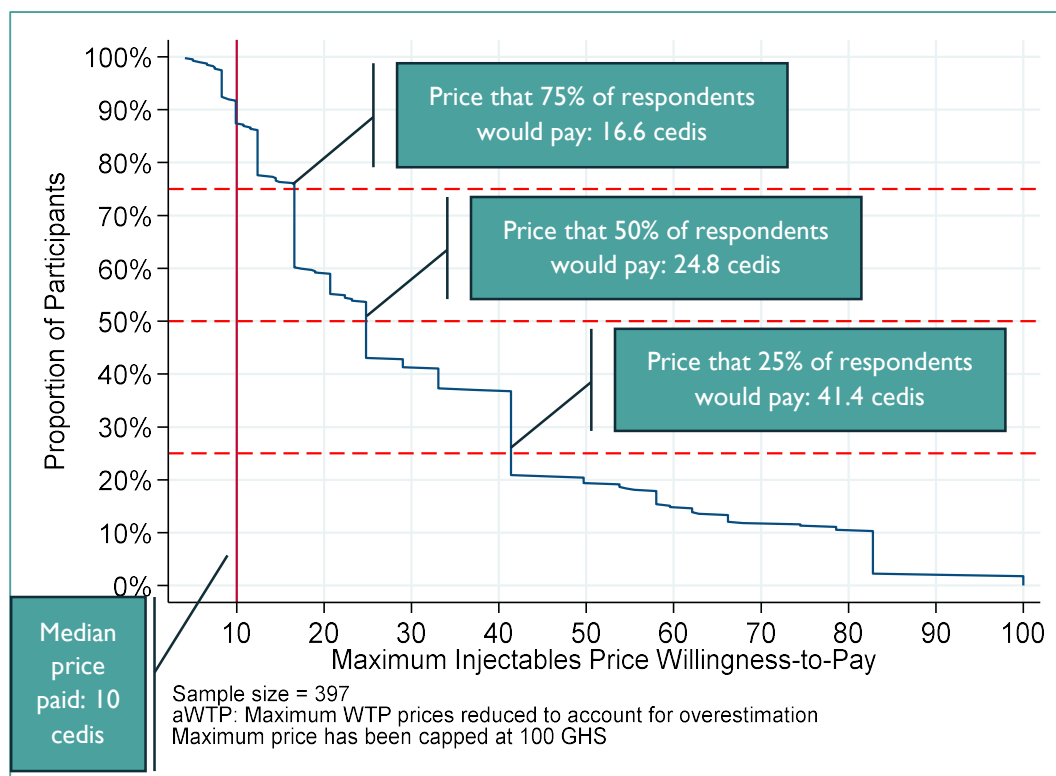
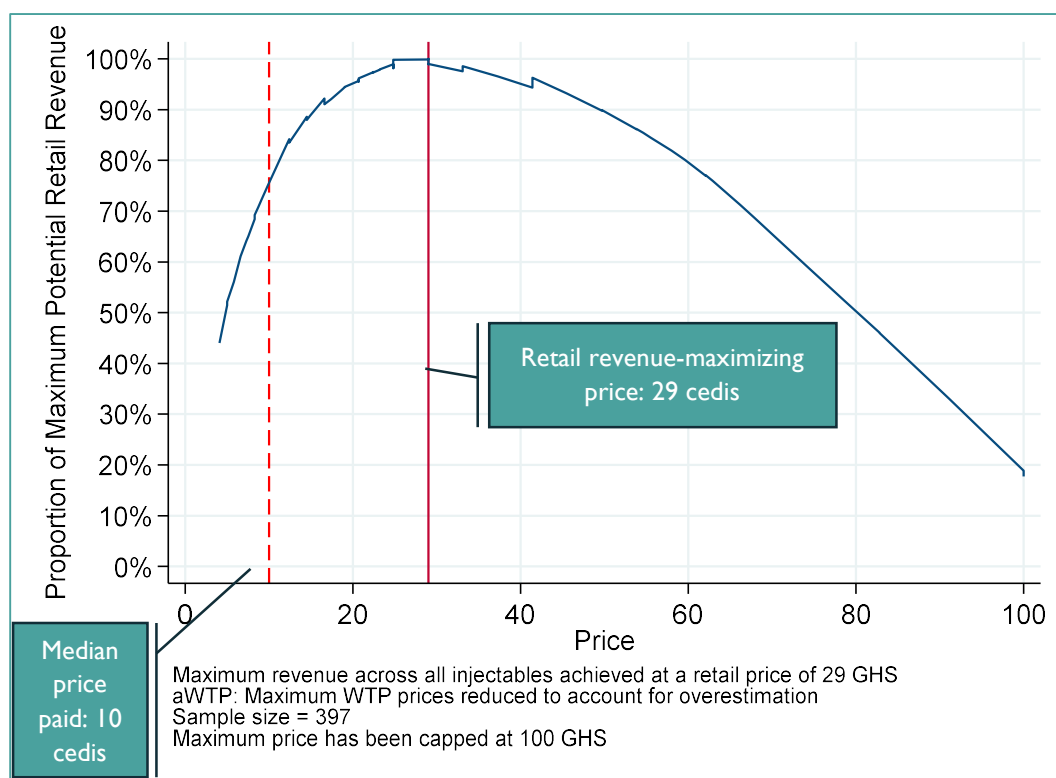


Figure 10 illustrates the aggregate revenue curve for injectable contraceptives. The red dotted vertical line represents the median price paid by consumers for their injectable contraceptive of 10 cedis. The solid red vertical line intersects the revenue curve at its peak, marking the retail revenue-maximizing price point at 29 cedis. The difference between the median injectable visit price of 10 cedis and the revenue-maximizing price of 29 cedis suggests a significant opportunity for enhanced cost recovery, again noting that retail prices do reflect markup from distribution prices. It is also important to note that while this finding supports our earlier observation from the demand curve analysis that the demand for injectables is relatively inelastic, according to the demand curve, somewhere between 40 and 50% of private sector injectable users in these geographic regions would be willing to pay this revenue-maximizing price. This underscores the need for careful consideration and balance between business decisions and the practical realities of those business decisions for FP users.

FIGURE 10: AGGREGATE ADJUSTED INJECTABLE REVENUE CURVE



## A Brand-Specific OCP Analysis

Secure is a combined OCP marketed by TFHO and one of the most popular OCP brands in the Ghanaian market. In this study, 60% of OCP users reported last purchasing this brand. The following is a WTP analysis of Secure brand OCP users. It is important to note that this study was not powered for brand-specific sub-analyses and so these results should be interpreted with caution and treated as descriptive and indicative. The median price paid per pack for Secure brand OCPs was 6 cedis. Figure 11 disaggregates Secure brand pack prices by region. In Accra, the median price for Secure OCPs was 6 cedis, while the median price in Tamale was 9 cedis. Figure 12 breaks down the price distributions by facility type. In pharmacies, consumers paid a median price of 5 cedis for Secure OCPs, whereas in OTCMSs, the median price was 9 cedis.

FIGURE 11: AMOUNT PAID FOR SECURE OCP BRAND BY REGION

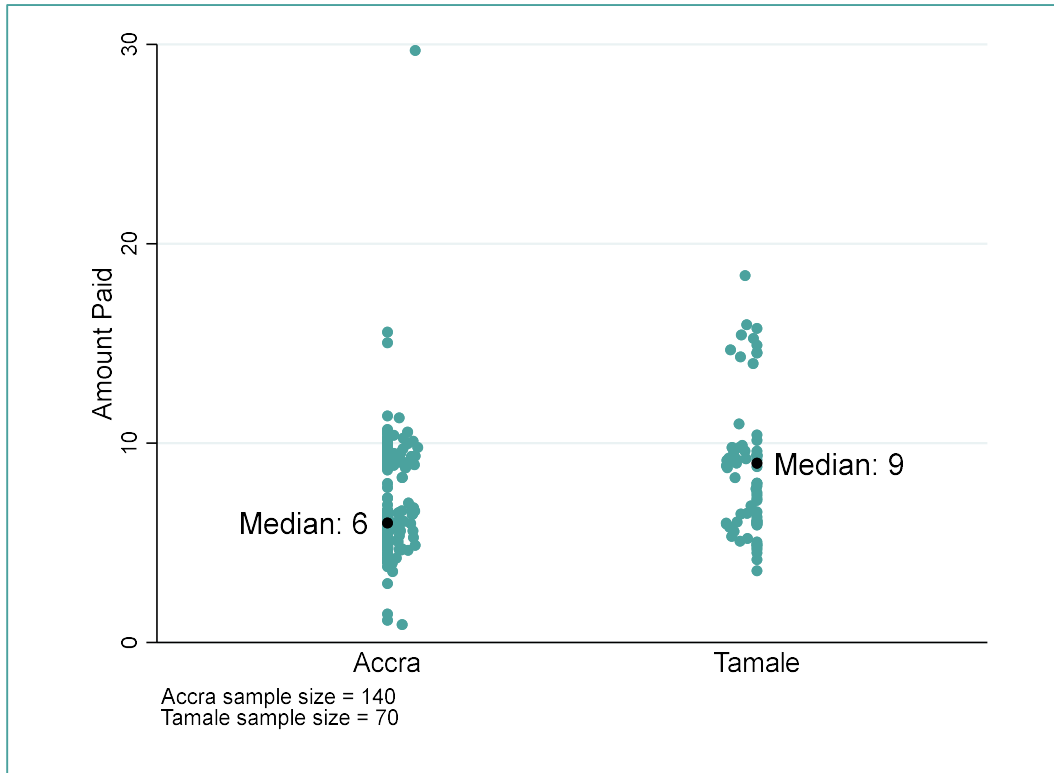


FIGURE 12: AMOUNT PAID FOR SECURE OCP BRAND BY FACILITY TYPE

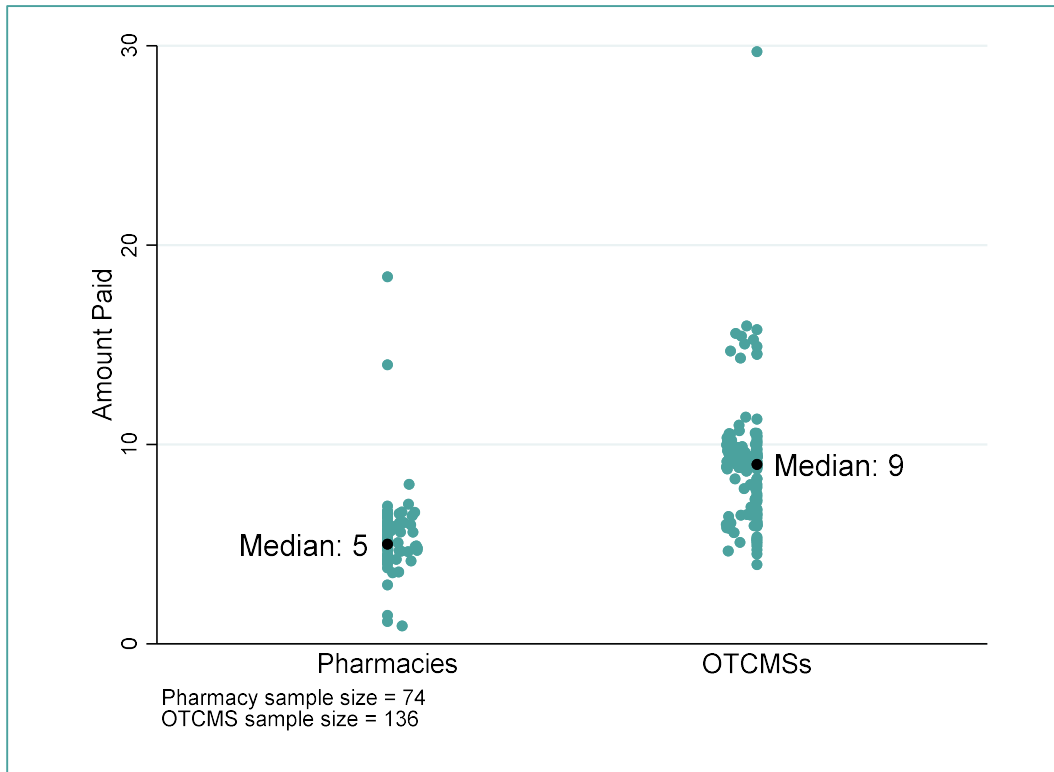
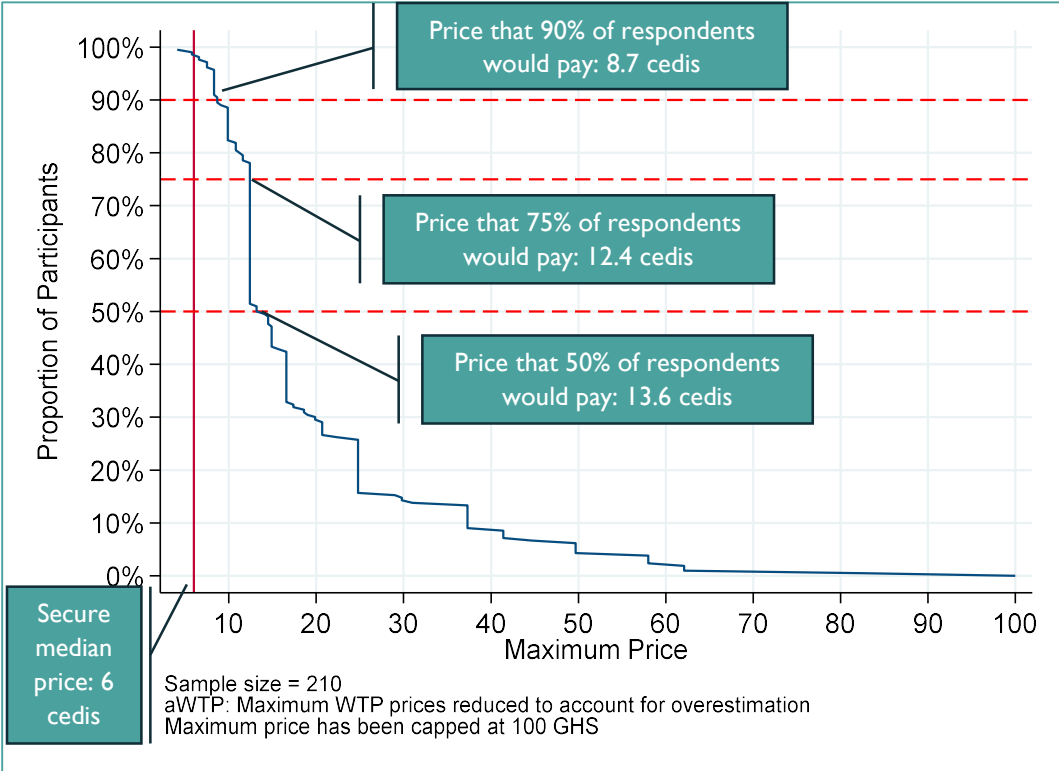


Figure 13 illustrates the Secure OCP brand adjusted demand curve. Some 90% of respondents would be willing to pay 8.7 cedis, 75% would be willing to pay as much as 12.4 cedis, and 50% surveyed would be willing to pay up to 13.6 cedis for their method.

FIGURE 13: SECURE OCP BRAND ADJUSTED DEMAND CURVE



The calculated price elasticity of demand values reveals varying levels of consumer sensitivity to price changes across different segments of the demand curve. Between the 90% and 75% WTP levels, elasticity is 0.39, suggesting that small price increases relative to the current median price paid may not be met with offsetting reductions in demand. In contrast, between the 75% and 50% WTP levels, elasticity is approximately 3.44. This value indicates high elastic demand. Consumers in this segment are much more sensitive to price changes, meaning that even small price increases at higher price points may lead to significant reductions in demand. Demand for Secure brand OCPs appears more inelastic than aggregate analyses of OCP demand, suggesting that Secure consumers are relatively more tolerant of lower-end price increases. However, at higher-range price increases, demand becomes highly elastic.

FIGURE 14: SECURE OCP BRAND ADJUSTED REVENUE CURVE

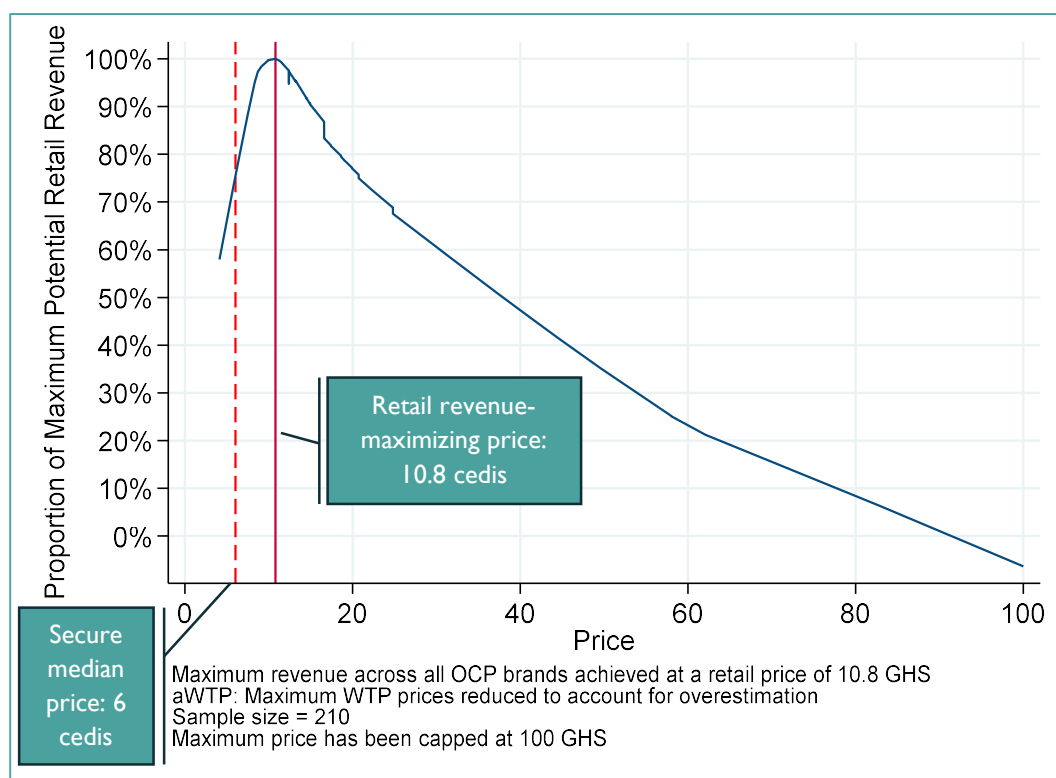


Figure 14 illustrates the Secure OCP brand revenue curve. The difference between Secure's retail revenue-maximizing price and its current median price is 4.8 cedis, compared to a difference of 2.6 cedis for OCPs overall. These analyses suggest that the Secure OCP brand has greater leeway for price optimization and potential enhanced cost recovery compared to the overall private sector market for OCPs.

## Research Question 2: What would clients do if their chosen method's price was higher than what they were willing to pay?

An important corollary when exploring enhanced cost recovery and greater private market sustainability is to consider what clients would do if they learned that their method had become more expensive than what they were willing to pay. Figures 15 and 16 describe how OCP and injectable respondents reported they would respond if they discovered that their method had been priced higher than what they were willing to pay. For OCP users, 19% reported that they would switch to a different method, 48% would go somewhere else to obtain the method, and 10% would stop using a contraceptive method altogether. For injectable users, 21% indicated they would switch to a different method, 35% would seek their method elsewhere, and 17% would discontinue using a contraceptive method. For both methods, roughly a quarter of women did not know what they would do or would do something other than the given options.

FIGURE 15: WHAT OCP USERS REPORT THEY WOULD DO IF THEIR METHOD BECAME TOO EXPENSIVE

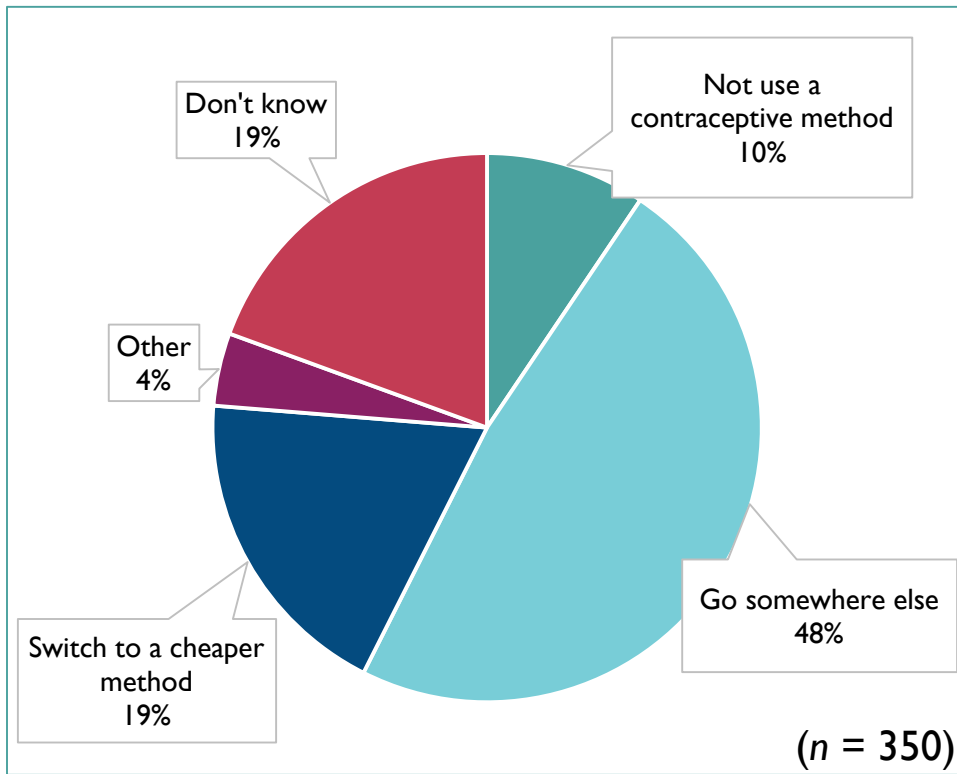
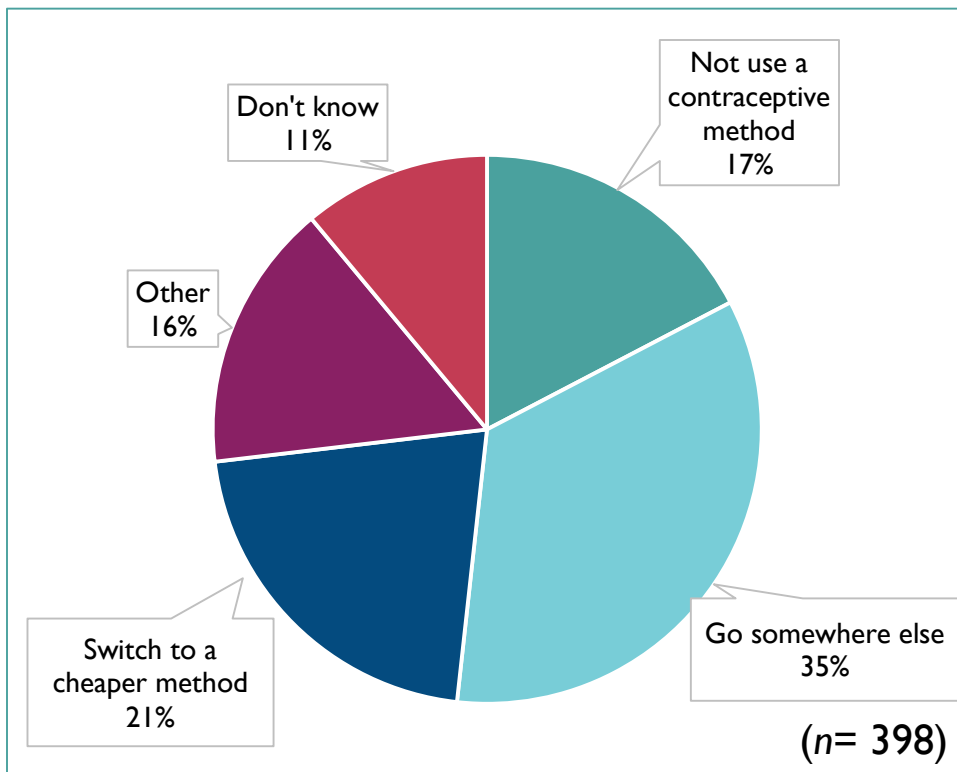


FIGURE 16: WHAT INJECTABLE USERS REPORT THEY WOULD DO IF THEIR METHOD BECAME TOO EXPENSIVE



The following sections will further explore the demographic profiles of these respondent subgroups and examine the implications of these proportions.

## OCP Users

Table 10 compares the demographic and consumer profiles of OCP users who reported that they would switch methods, go somewhere else, or stop using a contraceptive method with the demographic and consumer profiles of the overall study sample.

TABLE 10: DEMOGRAPHIC AND CONSUMER PROFILES OF OCP USERS BY REPORTED ACTIONS IF THEIR METHOD BECOMES TOO EXPENSIVE

|                               | All OCP users<br><i>n</i> = 350 |       | Switch methods<br><i>n</i> = 66 | Go somewhere else<br><i>n</i> = 168 | Not use a method<br><i>n</i> = 33 |
|-------------------------------|---------------------------------|-------|---------------------------------|-------------------------------------|-----------------------------------|
| <b>Age</b>                    |                                 |       |                                 |                                     |                                   |
| 18-24                         | 32.9%                           | 28.8% | 35.1%                           | 33.3%                               |                                   |
| 25-29                         | 26.9%                           | 28.8% | 20.8%                           | 39.4%                               |                                   |
| 30-34                         | 19.7%                           | 27.3% | 19.1%                           | 15.2%                               |                                   |
| ≥ 35                          | 20.5%                           | 15.1% | 25%                             | 12.1%                               |                                   |
| <b>Relative wealth</b>        |                                 |       |                                 |                                     |                                   |
| Poorest                       | 1.1%                            | 0%    | 1.8%                            | 0%                                  |                                   |
| Poorer                        | 5.1%                            | 1.5%  | 7.1%                            | 6.1%                                |                                   |
| Middle                        | 10.9%                           | 4.5%  | 12.5%                           | 24.2%                               |                                   |
| Richer                        | 16.6%                           | 18.2% | 15.5%                           | 15.1%                               |                                   |
| Richest                       | 66.3%                           | 75.8% | 63.1%                           | 54.5%                               |                                   |
| <b>Duration of method use</b> |                                 |       |                                 |                                     |                                   |
| First use                     | 36.3%                           | 30.3% | 29.8%                           | 54.5%                               |                                   |
| <6 months                     | 6.9%                            | 10.6% | 7.7%                            | 6.1%                                |                                   |
| 6 months to 1 year            | 9.4%                            | 10.6% | 9.52%                           | 9.1%                                |                                   |
| 1 to 2 years                  | 13.7%                           | 13.6% | 13.1%                           | 9.1%                                |                                   |
| ≥2 years                      | 33.7%                           | 34.8% | 40%                             | 21.2%                               |                                   |

|   | All OCP users<br>n = 350 | Switch methods<br>n = 66 | Go somewhere else<br>n = 168 | Not use a method<br>n = 33 |
|---|--------------------------|--------------------------|------------------------------|----------------------------|
| <b>Who decides to use contraception</b> |                          |                          |                              |                            |
| Respondent                              | 71.1%                    | 74.2%                    | 66.1%                        | 75.8%                      |
| Husband/partner                         | 12.6%                    | 6.1%                     | 13.7%                        | 12.1%                      |
| Jointly                                 | 14.9%                    | 18.2%                    | 17.9%                        | 12.1%                      |
| Someone else                            | 1.4%                     | 1.5%                     | 2.3%                         | 0%                         |
| <b>Ease of paying for method</b>        |                          |                          |                              |                            |
| Difficult                               | 12.3%                    | 6.1%                     | 7.74%                        | 27.3%                      |
| Neither difficult<br>nor easy           | 24.3%                    | 27.3%                    | 27.4%                        | 30.3%                      |
| Easy                                    | 62.3%                    | 65.1%                    | 64.9%                        | 42.4%                      |
| Don't know                              | 1.1%                     | 1.5%                     | 0%                           | 0%                         |
| <b>Reason for selecting OCP brand*</b>  |                          |                          |                              |                            |
| Most affordable                         | 34%                      | 31.8%                    | 35.7%                        | 39.4%                      |
| Consider it good<br>quality             | 45.7%                    | 48.5%                    | 52.4%                        | 15.1%                      |
| Family or friend<br>recommended it      | 28.9%                    | 27.3%                    | 29.2%                        | 33.3%                      |

\*Select all that apply response options

In terms of age, OCP users who reported that they would stop using their method if it became too expensive were more frequently in the younger age ranges compared to the overall sample. This same group was also more likely to reside in households within either the poor or middle wealth quintiles. Regarding the duration of method use, those who indicated they would go somewhere else for their method had more often been long-term users ( $\geq$  two years) compared to the overall sample. In contrast, those who said they would stop using a method more frequently reported this being their first time purchasing the method.

When it came to decision-making, respondents who indicated they would switch to another contraceptive method more often reported that they, either alone or jointly with their partner, made the decision to use contraception, in comparison to the overall sample. Notably, more than twice the proportion of those who said they would stop using a method also reported that paying for their method was difficult, compared to the overall sample. Affordability was a key factor for all three groups when selecting their method. However, those who said they would stop using their method were less

likely than the overall sample to report that brand quality was an important consideration in their choice.

FIGURE 17: ALTERNATIVE FACILITIES FOR OCP USERS WHO WOULD GO ELSEWHERE

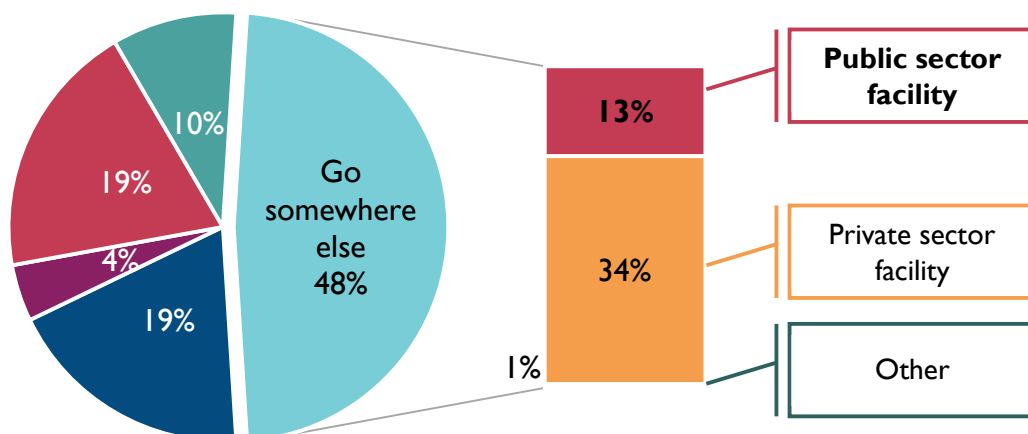


Figure 17 illustrates the different facility types that OCP users who reported they would go elsewhere if their method became too expensive would choose. We see that 13% of those indicating they would go elsewhere would opt for a public sector facility.

## Injectable Contraceptive Users

Table 11 compares the demographic profiles of injectable users who reported that they would switch methods, go somewhere else, or stop using a contraceptive method with the demographics of the overall study sample.

TABLE 11: DEMOGRAPHIC AND CONSUMER PROFILES OF INJECTABLE USERS BY REPORTED ACTIONS IF THEIR METHOD BECOMES TOO EXPENSIVE

|            | All OCP users<br><i>n</i> = 397 | Switch methods<br><i>n</i> = 85 | Go somewhere else<br><i>n</i> = 137 | Not use a method<br><i>n</i> = 68 |
|------------|---------------------------------|---------------------------------|-------------------------------------|-----------------------------------|
| <b>Age</b> |                                 |                                 |                                     |                                   |
| 18-24      | 25.9%                           | 16.5%                           | 24.1%                               | 26.5%                             |
| 25-29      | 27.2%                           | 31.8%                           | 24.8%                               | 33.8%                             |
| 30-34      | 23.2%                           | 25.9%                           | 26.3%                               | 25%                               |
| ≥ 35       | 23.7%                           | 25.9%                           | 24.8%                               | 14.7%                             |

|   | <b>All OCP users<br/>n = 397</b> | <b>Switch methods<br/>n = 85</b> | <b>Go somewhere else<br/>n = 137</b> | <b>Not use a method<br/>n = 68</b> |
|---|----------------------------------|----------------------------------|--------------------------------------|------------------------------------|
| <b>Relative wealth</b>                  |                                  |                                  |                                      |                                    |
| Poorest                                 | 4.8%                             | 3.5%                             | 5.1%                                 | 7.3%                               |
| Poorer                                  | 13.6%                            | 7.1%                             | 15.3%                                | 13.2%                              |
| Middle                                  | 16.4%                            | 14.1%                            | 16.8%                                | 14.7%                              |
| Richer                                  | 23.4%                            | 16.5%                            | 19.7%                                | 29.4%                              |
| Richest                                 | 41.8%                            | 58.8%                            | 43.1%                                | 35.3%                              |
| <b>Duration of method use</b>           |                                  |                                  |                                      |                                    |
| First use                               | 34.5%                            | 35.3%                            | 35.8%                                | 35.3%                              |
| <6 months                               | 3.8%                             | 3.5%                             | 1.5%                                 | 4.4%                               |
| 6 months to 1 year                      | 12.1%                            | 14.1%                            | 8.8%                                 | 13.2%                              |
| 1 to 2 years                            | 15.1%                            | 16.5%                            | 16.8%                                | 13.2%                              |
| ≥2 years                                | 34.5%                            | 30.6%                            | 37.2%                                | 33.8%                              |
| <b>Who decides to use contraception</b> |                                  |                                  |                                      |                                    |
| Respondent                              | 58.9%                            | 55.3%                            | 59.8%                                | 70.6%                              |
| Husband/partner                         | 8.8%                             | 8.2%                             | 8%                                   | 7.3%                               |
| Jointly                                 | 31%                              | 35.3%                            | 30.7%                                | 20.6%                              |
| Someone else                            | 1.3%                             | 1.2%                             | 1.5%                                 | 1.5%                               |
| <b>Ease of paying for method</b>        |                                  |                                  |                                      |                                    |
| Difficult                               | 20.4%                            | 12.9%                            | 26.3%                                | 27.9%                              |
| Neither difficult nor easy              | 8.3%                             | 5.9%                             | 6.6%                                 | 11.8%                              |
| Easy                                    | 71.3%                            | 81.2%                            | 67.1%                                | 60.3%                              |

For injectable contraceptive users, there was a balanced representation across the four age groups in the sample. However, those who indicated they would stop using a method if it became too expensive more frequently belonged to the two younger age groups. In contrast, individuals who reported that they would go elsewhere were more likely to live in households within the bottom two wealth quintiles

compared to the overall sample. In terms of method use duration, all three subgroups — those who would stop using, switch, or go elsewhere — had durations comparable to the overall sample. Respondents who indicated they would no longer use a method more frequently reported that they made the decision to use contraception alone, rather than jointly with a partner, compared to the overall sample. Finally, this group was also the least likely to report that paying for their method was easy, compared to the other two subgroups.

FIGURE 18: ALTERNATIVE FACILITIES FOR INJECTABLE USERS WHO WOULD GO ELSEWHERE

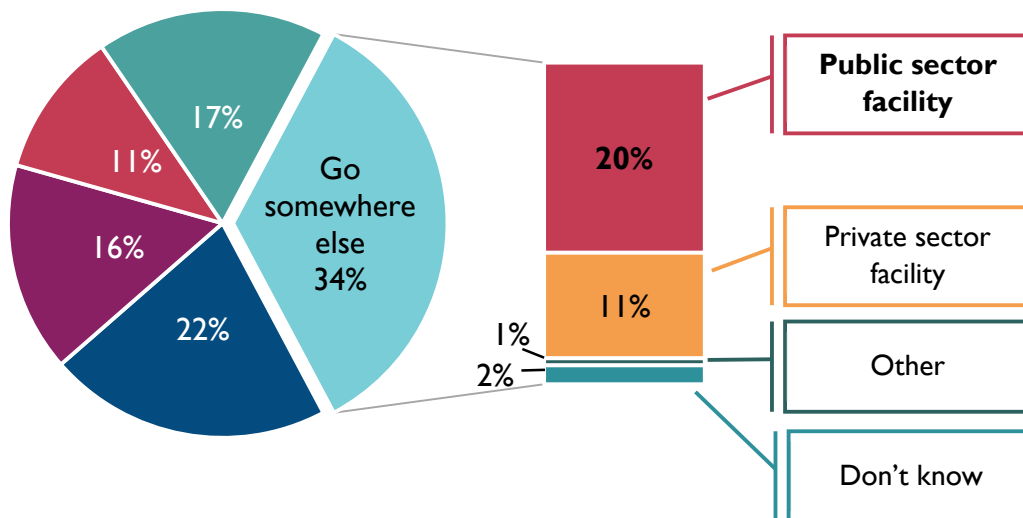


Figure 18 provides further details on the different facility types that injectable users who reported they would go elsewhere if their method became too expensive would choose. We see that 20% of those indicating they would go elsewhere would opt for a public sector facility.

## Quantifying the Potential Number of Women Discontinuing Contraception or Moving to the Public Sector

By combining the study’s response patterns with national-level population estimates of Ghanaian private sector contraceptive consumers, we can quantify the potential number of current OCP and injectable consumers that would either stop using a method altogether or move to the public sector for their method. We did this by combining survey responses with national population estimates of Ghanaian private sector contraceptive users from M4M’s [Contraceptive Market Size Visualizer](#). This allowed us to estimate at a national level, how many women might stop using a contraceptive method and how many might switch to public sector services if each method’s price was increased to its revenue-maximizing price point. Table 12 provides national estimates for these two groups assuming that study response patterns reflect national trends.

TABLE 12: NATIONAL ESTIMATES OF WOMEN WHO WOULD STOP USING OR SWITCH TO PUBLIC SECTOR CONTRACEPTIVES IF PRICES INCREASE

|                          | Go somewhere else | Obtain current method from the public sector |
|--------------------------|-------------------|--|
| Oral contraceptive users | 4,000             | 5,400  |
| Injectable users         | 6,600             | 1,500  |

## Implications

Ghana's private health market plays a critical role in meeting the contraceptive care needs of many Ghanaians. Currently, this market is largely dominated by socially marketed products. Socially marketed products are essential as they promote behavior change, broaden the range of available contraceptive options at affordable prices, and enhance access to methods and services by diversifying when, how, and from whom clients can obtain them.<sup>12</sup> However, it is important to consider their impact on overall market sustainability as significant subsidy is required to socially market products.

As Ghana continues to experience economic growth and development, there is an opportunity to assess strategically the role of the private sector within the broader health market. As the country strives to achieve universal health coverage, the goal must be to create an efficient mixed health system capable of providing sustainable, high-quality, and affordable services to both public and private sector clients. Optimizing private sector product pricing is a necessary step in achieving private market sustainability and, by extension, universal health coverage. Ensuring that products are priced at or near cost recovery ensures that new and existing manufacturers, importers, distributors, and retailers along the contraceptive commodity value chain become and remain incentivized to service the Ghanaian market, even if donor subsidies decline.

Further, social marketing should be implemented in a way that avoids crowding out of commercial sector actors, especially in economically advanced countries with higher contraceptive prevalence rates.<sup>13</sup> Fair pricing strategies also foster competitive markets, encouraging new actors all along the value chain to enter the market. However, price increases that are not data-driven or evidence-informed can negatively impact access and use of FP products, particularly among poorer populations. Therefore, it is important to continually monitor price elasticity and ability to pay. With thoughtful integration of the private sector into the broader health market, targeted subsidies, and coordination, contraceptive products can be made accessible to everyone in need. This approach can safeguard free distribution for the poorest communities, while partially subsidized products are made available to those with moderate resources and commercially distributed, unsubsidized products are offered to those with ability and WTP.<sup>14</sup>

## Interpreting WTP Data

### General Considerations

A number of factors should be considered when interpreting the study's WTP results. First, most of the analyses in this study are aggregated and not specific to any product. As the brand-specific analysis of Secure shows, median retail prices and maximum WTP may differ by brand. Therefore, the information

in this report should be seen, for the most part, as offering a view of general market dynamics, not brand-specific insights. Social marketers and for-profit firms should use this information to complement their brand-specific knowledge, enhancing their understanding of overall market demand for OCPs and injectables. Second, for injectable contraceptives, the prices presented include facility and ancillary fees, which should be factored in when using the results to guide future price increases. Third, the study's sample was drawn primarily from two urban areas, with respondents belonging largely to the top three wealth quintiles of an urban-only relative wealth distribution. While nearly two-thirds of private sector contraceptive users reside in urban areas,<sup>2</sup> these results may not fully capture the WTP of less wealthy, rural clientele.

## Interpreting Prices from a Distributor's Perspective

It is important to keep in mind that the prices paid, and maximum revenue prices presented, are retail prices. Wholesalers and distributors should combine the information presented in this report with their knowledge of typical retailer product markups to estimate how retail prices will change as wholesale prices increase.

## Opportunities for Commodity Cost Recovery

This study contributes to our understanding of consumers' contraceptive commodity price sensitivity, an aspect of FP care that has remained understudied and mixed in its results. A systematic review exploring the existing literature on the influence of user fees on contraceptive use in low- and middle-income countries found only four studies meeting inclusion criteria.<sup>15</sup> Among these studies, one study conducted in Bangladesh concluded that users of condoms and OCP users were only slightly price-sensitive,<sup>16</sup> while a second study from Indonesia of all modern contraceptive methods found them to be price inelastic.<sup>17</sup> Our study tells a different, more nuanced story about the relationship between price and demand, one in which both method and brand influence consumers' sensitivity to price increases.

In this study of Ghanaian private sector OCP and injectable users, OCP analyses suggested that every 1% increase in price would result in a 1% decline in demand. This unit elastic relationship between price and demand aids in explaining a fairly narrow spread between the median aggregate price paid per pack of 9 cedis and the maximum revenue price point of 11.6 cedis. While there appears to be an opportunity for all OCP brands to consider price increases, the analysis cautions that beyond this point, the suspected decline in consumer demand and resulting drop in unit sales will exceed the additional revenue from higher pack prices.

The opportunity for increased cost recovery among Secure brand OCP users is slightly greater than the aggregate view. For Secure OCPs, product revenue could be expected to increase until reaching the brand's maximum revenue price of 10.8, a 4.8 cedis increase from its current median retail price of 6 cedis.

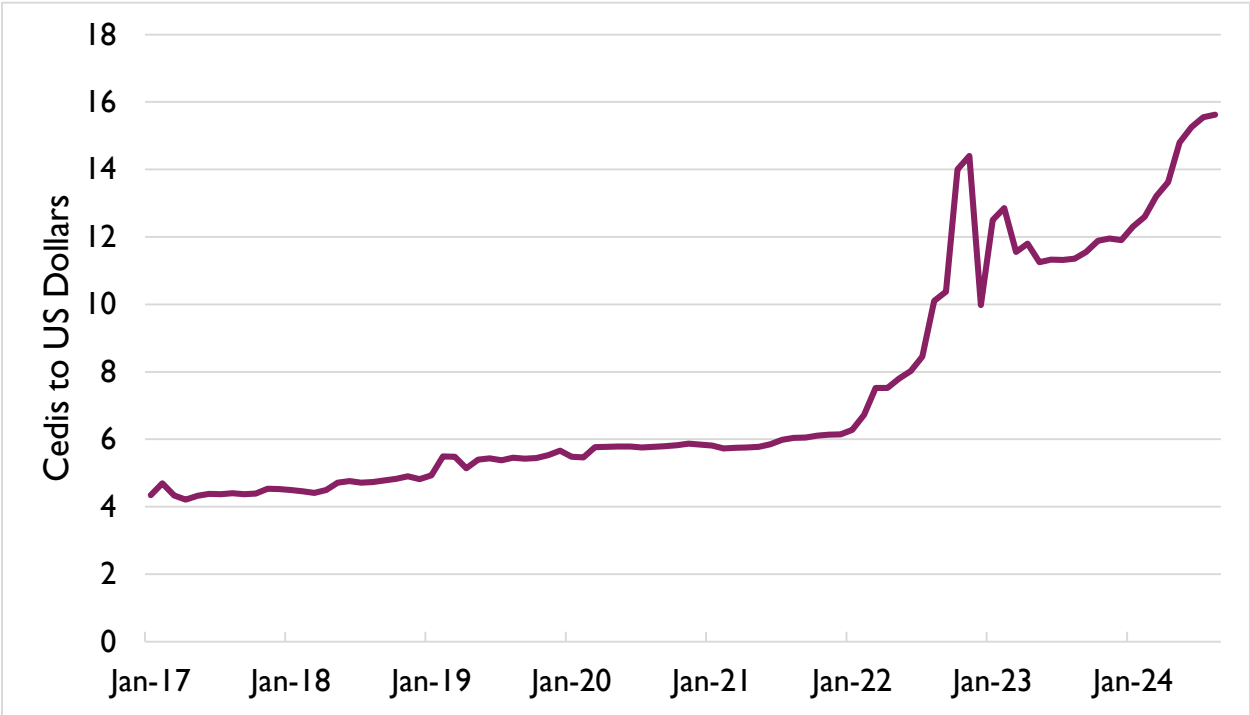
Perhaps the greatest opportunity for price recovery found by this study is in injectable contraceptives. Analyses indicated that the median visit price for injectables was 10 cedis, inclusive of facility and ancillary fees. With price elasticity of demand values less than 1 across much of the demand curve, demand for injectable contraceptives in the Ghanaian private sector appears inelastic. Additionally, with a maximum revenue visit price of 29 cedis, there is compelling evidence that cost recovery through moderate commodity price increases is a feasible goal.

A critical point to consider beyond these opportunities for price increases is that prices that may maximize business revenue should be carefully weighed against the evidence found in the study about what women would do if prices increased beyond what they would be willing to pay. In this study, 10% of OCP users and 17% of injectable users reported that they would stop using a method. This translates into potentially thousands more women who would have an unmet need for FP and be at risk for pregnancy. Additionally, a subset of both OCP users and injectable users indicated that they would go to the public sector to seek their contraceptive method if it became too expensive. This suggests that dialogues between market actors in both the public and private sectors are crucial to be able to discuss and plan for potential implications of this. Using a preferred method is an indicator of safe access to care and reproductive autonomy. Health officials and social marketing decision-makers must carefully consider the impact of increased prices on existing private sector clients. Issues that should be addressed include determining whether the public sector offers both a suitable range of contraceptive methods to serve as a more affordable alternative to the private sector and the capacity to serve an increase in new clients who no longer wish to obtain their method from a private source.

### Currency Devaluation as a Barrier to Cost Recovery

The Ghanaian cedi has depreciated sharply against many currencies, particularly the U.S. dollar (USD) since the start of 2022 (Figure 19). A weaker currency increases the cost of imports and may pose a structural barrier to cost recovery.

FIGURE 19: GHANAIAI CEDI TO US DOLLAR EXCHANGE RATE



When a commodity is procured in USD but sold in Ghanaian cedis, fluctuations in the exchange rate between the Ghanaian Cedi and the USD can significantly affect cost recovery. For example, if USD100 worth of contraceptive commodities are procured at an exchange rate of USD1 to 10 cedis, the cost of the commodity is 1,000 cedis. If those commodities are then sold in Ghana for the cost recovery price of 1,000 cedis, this would initially convert back to USD100 based on the original exchange rate.

However, if the cedi has since further depreciated and the exchange rate changes to USD1 to 15 cedis, the revenue of 1,000 cedis, once exchanged back to US dollars, would now only be worth USD67. This devaluation results in a shortfall of USD33 compared to the initial procurement cost. Consequently, the reduced USD value of these sales risks offsetting any price increases designed to enhance cost recovery. This has implications for both distributors and wholesalers making business decisions to work towards cost recovery as well as for funders who may use cost recovery as a goal of activities that they may choose to fund. In the case of the latter, funders may choose to peg the cost recovery price to a particular exchange rate. For instance, the exchange rate when the commodities are procured from manufacturers. Using the previous example, the funder could consider cost recovery to be 1,000 cedis, regardless of how the amount converts back to USD.

## Dissemination Event Feedback

On Tuesday, October 8th, 2024, FHM Engage convened a stakeholder dissemination event in Accra, Ghana, to present findings from various private health sector engagement activities, including this WTP study. The event generated valuable discourse, with stakeholders raising thought-provoking questions and offering insights that both enriched the discussion and highlighted potential areas for future research. The following is a selection of questions and observations offered following the presentation.

### How Does the Availability of Alternatives Influence One's WTP?

One question raised during the discussion centered on the relationship between WTP and the availability of alternatives. This query touches upon a fundamental principle in consumer behavior: the elasticity of demand in relation to market competition. Economic theory and empirical evidence consistently demonstrate that consumers' WTP for a product is inversely related to the availability of substitutes. When consumers have access to multiple alternatives, their maximum WTP for any specific option typically decreases, as they can readily switch to comparable, potentially more affordable alternatives if prices exceed their threshold.

In the context of this study, the researchers deliberately chose not to investigate how alternatives influenced respondents' WTP, given the current limited range of OCP and injectable brands available in Ghana's private health market. However, the question raises an important consideration for future market dynamics. Should the Ghanaian private health market expand to offer a broader selection of contraceptive brands, it is reasonable to hypothesize that consumers' maximum WTP for any particular brand would be moderated by the presence of acceptable alternatives.

### What Accounts for the Differences in Prices Paid for OCPs in Pharmacies and OTCMSs?

Another compelling question emerged regarding the observed median price differential between OCPs sold in pharmacies (6 cedis) and OTCMSs (9 cedis). This price disparity appears to be rooted in supply chain economics and geographical factors. Pharmacies, which typically operate on a larger scale and carry a wider variety of products, likely benefit from economies of scale in their procurement processes. Their ability to place larger bulk orders with wholesalers could translate into better purchase discounts. Moreover, pharmacies are predominantly situated in urban areas, in closer proximity to wholesalers, resulting in reduced transportation costs.

Conversely, OTCMSs, which generally maintain a more limited pharmaceutical inventory and are more frequently located in peri-urban and rural regions, face higher operational costs. Their smaller order volumes may result in less favorable wholesale pricing, while their geographical distance from supply centers increases transportation expenses. This same economic dynamic could help explain the regional median price variation observed between Accra (6 cedis) and Tamale (9 cedis). Retailers in Tamale must absorb the additional cost of transporting goods approximately 620 kilometers from Accra, where most importers and wholesalers are based, naturally leading to higher consumer prices.

## Fluctuations in WTP

A third discussion point centered on the temporal nature of WTP findings. Stakeholders raised important questions about whether the study's findings should be viewed as fixed or dynamic over time, particularly in light of ongoing depreciation of the Ghanaian Cedi against major global currencies such as the USD. The presenters emphasized that these findings represent a snapshot in time rather than an immutable price point, as consumers' WTP is influenced by various dynamic factors, including price inflation driven by higher import costs.

This temporal dimension was further illuminated by an importer's observation that while price increases typically trigger an initial decline in demand, there is often a recovery in the medium to long term as markets adjust. However, this pattern has its limitations; substantial price increases could potentially result in more lasting negative impacts on both demand and revenue. This insight underscores the importance of viewing WTP as a dynamic metric that responds to changing economic conditions, rather than a static measure, suggesting the need for periodic reassessment of consumer preferences and purchasing power in markets characterized by significant currency fluctuations. These fluctuations also highlight the importance of ongoing demand generation activities that can help to increase consumer knowledge and demand for contraceptive commodities.

## Limitations

The study has several notable limitations. First, sampling was limited to only high-volume service delivery points in two cities in Ghana, and as a result, the findings are not nationally representative. While this focus means that the resulting product demand and revenue curves cannot be generalized to a broader national population, it allowed for more expedient data collection. Furthermore, the study's insights are particularly relevant to the strategic goals of key private health market organizations, providing valuable localized data to inform decision-making in these specific urban contexts.

Another limitation relates to the potential for overestimation bias in respondents' WTP. Although efforts were made to account for this bias by incorporating meta-analytical data on hypothetical bias to adjust the WTP estimates, the available evidence used to inform these adjustments primarily derives from studies of consumer goods unrelated to contraceptive products. Contraceptive methods, which are often purchased with distinct considerations around personal health, family planning, and social norms, may elicit different consumer behavior than general goods. As a result, there is some ambiguity regarding the appropriateness of these adjustments in the specific context of this study. Consequently, the adjusted WTP values presented may underestimate true consumer willingness in some instances and overestimate it in others, introducing a degree of uncertainty into the results.

In this study, prices paid by respondents purchasing fractional packs of OCPs were converted into three-cycle pack-equivalents to enable consistent comparisons between consumers buying full packs and

those purchasing individual cycles. However, this method assumes proportional pricing, which may not accurately reflect market practices. Specifically, if OTCMSs or pharmacies offer discounts on full packs such that it becomes cheaper to purchase a full pack compared to buying individual cycles at the fractional price multiplied by three, this could lead to inflated pack-equivalent prices for respondents purchasing fractional packs. Consequently, this inflation might also overestimate their maximum willingness to pay. Despite this limitation, the strategy was necessary to standardize prices and facilitate meaningful comparisons across respondents purchasing varying quantities of OCPs.

Lastly, the study lacks detailed contextual information regarding respondents' potential actions if their preferred contraceptive method were priced beyond their stated maximum WTP. While such information would provide critical insights into consumer decision-making processes—such as why they would switch to another method, seek care in a different sector, or discontinue contraceptive use—this was not collected due to concerns about the length of the survey instrument. The decision to capture only quantitative data was made to reduce respondent fatigue and maintain the overall quality of the data, but it limits the ability to fully interpret the implications of price sensitivity in this population. Future research could address this gap by integrating qualitative methods, such as interviews or focus group discussions, to explore the motivations and considerations underlying respondents' pricing thresholds.

## Conclusion

This study provides valuable insights into the WTP of Ghanaian private sector contraceptive clients and their potential actions if their method becomes too expensive. The findings suggest that there are opportunities for cost recovery for the two methods studied, but consumer demand and broader economic factors must be carefully considered when contemplating price increases. As many countries face declining subsidies in their private contraceptive markets, funders and market actors should consider conducting similar studies across other contraceptive methods and countries to understand in greater depth how cost recovery can support healthier, more sustainable private contraceptive markets and contribute to advancing universal health coverage.

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|     |  |  |                                    |                                     |
|-----|--|--|------------------------------------|-------------------------------------|
|     |  | 4 or older   | _____                              |                                     |
|     |  |  | _____                              |                                     |
|     |  |  | _____                              |                                     |
|     |  |  | _____                              |                                     |
| 104 | Would you like to have (a/another) child in the future?  | Yes<br>No<br>Can't get pregnant<br>Undecided/Don't know  | 1<br>2<br>3<br>99                  | GO TO 106<br>GO TO 106<br>GO TO 106 |
| 105 | How long would you like to wait from now to get pregnant?  | _____ years,<br>_____ months<br>Soon/now<br>Can't get pregnant<br>After marriage<br>Other:<br>specify _____<br>Don't know  | <br><br>85<br>86<br>87<br>88<br>99 |                                     |
| 106 | What is the highest grade/year you completed?<br><br><b>PROBE FOR THE HIGHEST YEAR COMPLETED</b> | No grade completed..... 00<br>Primary School.....1 2 3 4 5 6<br>Junior High School.....7 8 9<br>Senior High School.....10 11 12<br>University.....13 14 15<br>16+<br>Vocational.....13 14 15<br>No response.....<br>99 |                                    |                                     |

## 2. Ability to Pay Questions

| Q.  | QUESTION   | RESPONSE CODE   | SKIP        |
|-----|--|---|-------------|
| 200 | Does your household have:<br>Radio<br>Television<br>Computer/tablet computer<br>Refrigerator<br>Cabinet/cupboard | YES NO<br>1 2<br>1 2<br>1 2<br>1 2<br>1 2                     |             |
| 201 | Does any member of your household have:<br>Wristwatch<br>Bank Account  | YES NO<br>1 2<br>1 2  |             |
| 202 | What is the main source of drinking water for members of your household?   | Public tap/standpipe<br>Piped into dwelling<br>Well or spring | 1<br>2<br>3 |

|     |  |   |    |           |
|-----|--|---|----|-----------|
|     |  | Bottled water                             | 4  |           |
|     |  | Sachet water                              | 5  |           |
|     |  | Other source of drinking water            | 6  |           |
| 203 | What kind of toilet facility do members of your household usually use?   | Flush to manhole/septic tank (not shared) | 1  |           |
|     |  | Other toilet facility                     | 2  |           |
| 204 | What type of fuel does your household mainly use for cooking?            | Wood                                      | 1  |           |
|     |  | Liquefied petroleum gas                   | 2  |           |
|     |  | Other source of cooking fuel              | 3  |           |
| 205 | What is the main material of the floor of your dwelling?                 | Earth/sand                                | 1  |           |
|     |  | Wood planks                               | 2  |           |
|     |  | Ceramic/marble/porcelain tiles            | 3  |           |
|     |  | Cement                                    | 4  |           |
|     |  | Other material                            | 5  |           |
| 206 | What is your occupation?<br>That is, what kind of work do you mainly do? | Unemployed, not looking for work          | 1  |           |
|     |  | Unemployed, looking for work              | 2  | GO TO 300 |
|     |  | Home/domestic work in own home            | 3  | GO TO 300 |
|     |  | Agriculture                               | 4  |           |
|     |  | Unskilled manual                          | 5  | GO TO 300 |
|     |  | Skilled manual                            | 6  |           |
|     |  | Sales & services                          | 7  |           |
|     |  | Clerical                                  | 8  |           |
|     |  | Professional/technical/ managerial        | 9  |           |
|     |  | Student                                   | 10 | GO TO 300 |
|     |  | Other: specify _____                      | 88 |           |
|     |  | Prefer not to say                         | 99 | GO TO 300 |
| 207 | Are you paid in cash or kind for this work or are you not paid at all?   | Cash only                                 | 1  |           |
|     |  | Cash & Kind                               | 2  |           |
|     |  | In kind only                              | 3  |           |
|     |  | Not paid                                  | 4  |           |

### 3. Type of Visit

| Q.   | QUESTION  | RESPONSE CODE  | SKIP         |                        |
|------|---|--|--------------|------------------------|
| 300  | Is this your first visit to this facility?                      | Yes<br>No  | 1<br>2       |                        |
| 301  | What is the main product or service you received today?         | Oral contraceptive pills<br>Injectable contraceptive<br>Other: specify               | 1<br>2<br>88 | GO TO 302<br>GO TO END |
| 301a | Did you receive any other tests or services during your visit?  | Yes<br>No  | 1<br>2       | GO TO 302              |
| 301b | What tests of services did you receive? (select all that apply) | Pregnancy test<br>HIV or sexually transmitted infection test<br>Other: specify _____ | 1<br>2<br>88 |                        |
| 302  | Is this your first time using this method?                      | Yes<br>No  | 1<br>2       | GO TO 304              |

|     |   |  |   |
|-----|---|--|---|
| 303 | How long have you been using this method?   | _____ year, _____ months   |   |
| 304 | Have you ever used any other methods?   | Yes 1<br>No 2<br>Don't know 99   | GO TO 306<br>GO TO 306  |
| 305 | What other methods have you used?   | Oral pills (if injectable user) 1<br>Injectable (if OCP user) 2<br>Condom 3<br>Implant 4<br>Intrauterine device (IUD) 5<br>Emergency contraception (EC) 6<br>Other: specify _____ 88 |   |
| 306 | Who usually makes the decision on whether or not you should use contraception, you, your (husband/partner), you and your (husband/partner) jointly, or someone else?                    | Respondent 1<br>Husband/partner 2<br>Respondent and husband/partner jointly 3<br>Someone else 4<br>Other: specify _____ 88   | GO TO 308<br>GO TO 308<br>GO TO 307<br>GO TO 308<br>GO TO 308 |
| 307 | When making this decision with your (husband/partner), would you say that your opinion is more important, equally important, or less important than your (husband's/partner's) opinion? | More important 1<br>Equally important 2<br>Less important 3  |   |
| 308 | <b>FOR ORAL CONTRACEPTIVE PILL USERS: GO TO 400<br/>FOR INJECTABLE USERS: GO TO 500</b>   |  |   |

#### 4. Willingness to Pay Questions

##### 1. Oral Contraceptive Pills

| Q.   | QUESTION  | RESPONSE CODE   | SKIP |
|------|---|---|------|
| 400  | <b>READ TO CLIENT:</b><br>I am going to ask you about the current cost of the oral contraceptive pills you have just purchased. The prices I ask you about are the same number of cycles you have just purchased. |   |      |
| 401  | What brand of pills did you purchase?   | Secure 1<br>Other: specify _____ 88   |      |
| 401a | How many cycles of pills did you purchase today?  | 1 1<br>2 2<br>3 3<br>Other: specify _____ 88  |      |
| 402  | How much did you pay?   | Amount _____  |      |
| 403  | What is the main reason you chose this brand of pill?   | It is the most affordable brand 1<br>It was the easiest brand to buy 2<br>It was the only brand available 3<br>I think it is a good quality brand 4 |      |

|     |  |   |    |                                     |
|-----|--|---|----|-------------------------------------|
|     |  | My friend or family member recommended it                           | 5  |                                     |
|     |  | My doctor or midwife recommended and prescribed this specific brand | 6  |                                     |
|     |  | I saw advertisements for this brand                                 | 7  |                                     |
|     |  | Other   | 88 |                                     |
|     |  | Prefer not to say   | 99 |                                     |
| 404 | Where did you get the money to pay for it today?   | Own money   | 1  |                                     |
|     |  | Husband/partner   | 2  |                                     |
|     |  | Family  | 3  |                                     |
|     |  | Friend  | 4  |                                     |
|     |  | Other: specify _____  | 88 |                                     |
|     |  | Prefer not to say   | 99 |                                     |
| 405 | How difficult or easy would you say it was to get the money to pay for your method?  | Very difficult  | 1  |                                     |
|     |  | Difficult   | 2  |                                     |
|     |  | Neither difficult nor easy  | 3  |                                     |
|     |  | Easy  | 4  |                                     |
|     |  | Very easy   | 5  |                                     |
|     |  | Don't know  | 99 |                                     |
| 406 | <p><b>READ TO CLIENT:</b><br/>I would like to ask you some questions about your response to potential changes in the price of these pills. These scenarios are fictional and for informational purposes only. This facility is not currently considering changing their prices. In answering these questions, please bear in mind the following:</p> <ol style="list-style-type: none"> <li>1. Assume that your income will stay the same even if this facility's prices change.</li> <li>2. Alternatives do exist for this brand of pills.</li> </ol> |   |    |                                     |
| 407 | Suppose you learned that the price of your OCP had increased from [original price] to [moderate price increase]. Would you purchase these pills if the price were [moderate price increase] cedis?<br>*moderate price = 75% increase   | Yes   | 1  | GO TO 409<br>GO TO 409              |
|     |  | No  | 2  |                                     |
|     |  | Don't know  | 99 |                                     |
| 408 | Suppose you learned that the price of your OCP had increased from [original price] to [large price]. Would you purchase these pills if the price were [large price] cedis?<br>*large price = 100% increase   | Yes   | 1  | GO TO 410<br>GO TO 410<br>GO TO 410 |
|     |  | No  | 2  |                                     |
|     |  | Don't know  | 99 |                                     |
| 409 | Suppose you learned that the price of your OCP had   | Yes   | 1  |                                     |
|     |  | No  | 2  |                                     |

|     |  |  |                             |  |
|-----|--|--|-----------------------------|--|
|     | increased from [original price] to [small price increase].<br>Would you purchase these pills if the price were [small price increase] cedis?<br>*large price = 100% increase | Don't know   | 99                          |  |
| 410 | At what price would you consider these pills to be starting to get expensive, so that it is not out of the question, but you would give some thought about buying them?      | Amount _____   |                             |  |
| 411 | What would be the highest price you would be willing to pay for this brand of pills?   | Amount _____   |                             |  |
| 412 | How easy or difficult would it be for you to afford OCPs at this highest price?  | Very difficult<br>Difficult<br>Neither difficult nor easy<br>Easy<br>Very easy<br>Don't know   | 1<br>2<br>3<br>4<br>5<br>99 |  |
| 413 | If this facility increased the price of these pills beyond what you were willing to pay, what would you do?  | Not use a contraceptive method<br>Go somewhere else<br>Switch to a cheaper method<br>Specify: _____<br>Other: specify _____<br>I don't know  | 1<br>2<br>3<br>88<br>99     | GO TO 414<br>GO TO 415<br>GO TO 414<br>GO TO <b>END</b><br>GO TO <b>END</b>  |
| 414 | How acceptable would stopping or switching your contraceptive method be to you?  | Not very acceptable<br>Acceptable<br>Very acceptable<br>I don't know   | 1<br>2<br>3<br>99           | GO TO <b>END</b><br>GO TO <b>END</b><br>GO TO <b>END</b><br>GO TO <b>END</b>   |
| 415 | Where would you go?  | Public sector facility<br>Other private facility<br>Other: specify _____<br>I don't know   | 1<br>2<br>88<br>99          | GO TO <b>END</b>   |
| 416 | Why would you go there?  | I could get the method for cheaper<br>I could get another method<br>I could ask someone about my options<br>I could get better quality service<br>It's closer to my home<br>Other: specify _____ | 1<br>2<br>3<br>4<br>5<br>88 | GO TO <b>END</b><br>GO TO <b>END</b><br>GO TO <b>END</b><br>GO TO <b>END</b><br>GO TO <b>END</b><br>GO TO <b>END</b> |

## 2. Injectable Contraceptive

| Q.  | QUESTION               | RESPONSE CODE | SKIP |
|-----|------------------------|---------------|------|
| 500 | <b>READ TO CLIENT:</b> |               |      |

|     |   |   |                        |
|-----|---|---|------------------------|
|     | I am going to ask you about the current cost of the injectable contraceptive you have just received. These scenarios are fictional and for informational purposes only. This facility is not currently considering changing their prices. The price I ask you about relates to the amount you paid for the consultation fee and the injection. Your total cost may have been greater if other tests recommended by clinic personnel were performed. |   |                        |
| 501 | Did you use your National Health Insurance/Ghana card to pay for all or part of your injection's cost?  | Yes 1<br>No 2   | GO TO END              |
| 502 | How much did you pay in total for the injection?<br><br><b>THIS IS THE AMOUNT THE CLIENT PAID OUT OF POCKET AT THIS CLINIC</b>  | Amount _____  |                        |
| 503 | Where did you get the money to pay for it today?  | Own money 1<br>Husband/partner 2<br>Family 3<br>Friend 4<br>Other: specify _____ 88<br>Prefer not to say 99 |                        |
| 504 | How difficult or easy would you say it was to get the money to pay for your method?   | Very difficult 1<br>Difficult 2<br>Neither difficult nor easy 3<br>Easy 4<br>Very easy 5<br>Don't know 99   |                        |
| 505 | <b>READ TO CLIENT:</b><br>I would like to ask you some questions about your response to potential changes in the price you paid. In answering these questions, please bear in mind the following:<br><br>1. Assume that your income will stay the same even if this facility's prices change.<br>2. Alternatives do exist for this service.   |   |                        |
| 506 | Suppose you learned that the price of your injectable had increased from [original price] to [moderate price increase]. Would you purchase this injectable if the price were [moderate price increase] cedis?<br>*moderate price = 75% increase   | Yes 1<br>No 2<br>Don't know 99  | GO TO 508<br>GO TO 508 |
| 507 | Suppose you learned that the price of your injectable had   | Yes 1<br>No 2   | GO TO 509<br>GO TO 509 |

|     |   |   |                             |  |
|-----|---|---|-----------------------------|--|
|     | increased from [original price] to [large price increase].<br>Would you purchase this injectable if the price were [large price increase] cedis?<br>*large price = 100% increase  | Don't know  | 99                          | GO TO 509  |
| 508 | Suppose you learned that the price of your injectable had increased from [original price] to [small price increase].<br>Would you purchase this injectable if the price were [small price increase] cedis?<br>*small price = 50% increase | Yes<br>No<br>Don't know   | 1<br>2<br>99                |  |
| 509 | At what price would you consider this injectable contraceptive to be starting to get expensive, so that it is not out of the question, but you would give some thought about paying for it?   | Amount _____  |                             |  |
| 510 | What would be the highest price you would be willing to pay for this injectable contraceptive?  | Amount _____  |                             |  |
| 511 | How easy or difficult would it be for you to afford injectable contraceptives at this highest price?  | Very difficult<br>Difficult<br>Neither difficult nor easy<br>Easy<br>Very easy<br>Don't know  | 1<br>2<br>3<br>4<br>5<br>99 |  |
| 512 | If this facility increased the price of this injectable contraceptive beyond what you were willing to pay, what would you do?   | Not use a contraceptive method<br>Go somewhere else<br>Switch to a cheaper method<br>Specify: _____<br>Other: specify _____<br>I don't know | 1<br>2<br>3<br>88<br>99     | GO TO 513<br>GO TO 514<br>GO TO 513<br>GO TO <b>END</b><br>GO TO <b>END</b>  |
| 513 | How acceptable would stopping or switching your contraceptive method be to you?   | Not very acceptable<br>Acceptable<br>Very acceptable<br>I don't know  | 1<br>2<br>3<br>99           | GO TO <b>END</b><br>GO TO <b>END</b><br>GO TO <b>END</b><br>GO TO <b>END</b> |
| 514 | Where would you go?   | Public sector facility<br>Other private facility<br>Other: specify _____<br>I don't know  | 1<br>2<br>88<br>99          | GO TO <b>END</b>   |
| 515 | Why would you go there?   | I could get the method for cheaper<br>I could get another method<br>I could ask someone about my options                                    | 1<br>2<br>3                 | GO TO <b>END</b><br>GO TO <b>END</b><br>GO TO <b>END</b>                     |

|  |  |                                    |    |                  |
|--|--|------------------------------------|----|------------------|
|  |  | I could get better quality service | 4  | <b>GO TO END</b> |
|  |  | It's closer to my home             | 5  | <b>GO TO END</b> |
|  |  | Other: specify _____               | 88 | <b>GO TO END</b> |

|            |   |
|------------|---|
| <b>END</b> | <b>END INTERVIEW AND THANK RESPONDENT FOR HER TIME.</b> |
|------------|---|

7. Time Interview Completed: \_\_\_\_\_ [use 12-hour clock]

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## About FHM Engage

Frontier Health Markets (FHM) Engage is a five-year cooperative agreement (7200AA21CA00027) funded by the United States Agency for International Development. We work to improve the market environment for greater private sector participation in the delivery of health products and services and to improve equal access to and uptake of high-quality consumer driven health products, services, and information. Chemonics International implements FHM Engage in collaboration with Core Partners: Results for Development (co-technical lead), Pathfinder and Zenysis. FHM Engage Network Implementation Partners include ACCESS Health India, Africa Christian Health Association Platform, Africa Healthcare Federation, Amref Health Africa, Ariadne Labs, CERRHUD, Insight Health Advisors, Makerere University School of Public Health, Metrics for Management, Solina Group, Strategic Purchasing Africa Resource Center, Scope Impact, Stage Six, Strathmore University, Total Family Health Organization, and Ubora Institute.

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