obtain client contact information. Three months after baseline, sellers were telephoned for an interview. Interviewers made up to five attempts to reach each seller to complete an interview, after which the seller was considered lost to follow-up. Interview questions covered demographics, contraceptive method sales experience, knowledge of and attitudes toward family planning, and satisfaction with injectable sales. Ninety percent of the trained sellers were reached for interview, for an analytic sample of 94 (65 in Amansie West and 29 in Ejisu-Juabeng).

Initial client interviews were conducted with all eligible injectable clients 2–4 weeks after their first purchase of the method from a licensed chemical seller shop, to allow them time to go to a health facility and receive the injection. Shop operators collected contact information of clients who agreed to participate in the study and shared this information biweekly with interviewers. Clients were eligible for interview if they were aged 18–49 and had access to a mobile telephone. Interviewers called clients up to five times to complete the survey; those not reached were considered lost to follow-up. Survey questions covered demographics, use of family planning, acceptability and accessibility of services, and satisfaction with services received. Clients also responded to open-ended questions about their reasons for purchasing the injectable at a licensed chemical seller shop rather than at a health facility. As compensation, participating clients received two cedis (about US$0.86)* of mobile telephone airtime.

Clients who purchased the injectable during the first three months of the study (June–August 2012) and who participated in an initial interview were called for a follow-up interview approximately three months after their first purchase to see if they had done so again; clients who first bought the injectable later were ineligible for a follow-up interview because of the study timeline. Follow-up interview questions focused on method continuation, location of follow-up services and satisfaction with services. Clients who completed the follow-up interview received an additional two cedis of mobile telephone airtime.

Some 298 injectable clients completed an initial interview (237 in Amansie West and 61 in Ejisu-Juabeng). Of those, 49% (115 in Amansie West and 32 in Ejisu-Juabeng) were eligible to participate in the follow-up interview; 63% of those eligible completed a follow-up interview (78 in Amansie West and 14 in Ejisu-Juabeng). The study was approved by the Protection of Human Subjects Committee of FHI 360 and Ghana Health Services Health and Research Development Division.

Data Analysis

Data were entered by clerks at the FHI 360 Accra office. Data cleaning took place there and at the FHI 360 headquarters in North Carolina, USA. Descriptive analyses were conducted by FHI 360 North Carolina staff using STATA 10 and SAS 9.3. All descriptive analyses were summarized using frequencies and percentages, or means and ranges as appropriate.

<table>
<thead>
<tr>
<th>Variable</th>
<th>All (N=94)</th>
<th>Amansie West (N=65)</th>
<th>Ejisu-Juabeng (N=29)</th>
</tr>
</thead>
</table>

**% selling contraceptive method**
- Injectable: 97%
- Condom: 82%
- Pills (3-pack): 95%
- IUD: 1%

**% who sold injectable prior to study**
- 4%

**Mean no. of methods sold per week (range)**
- Injectable: 2 (0–22)
- Condom: 16 (0–125)
- Pills (3-pack): 8 (0–40)

**Mean costs per method in US$$ (range)**
- Injectable: $0.21 ($0.02–0.22)
- Condom: $0.19 ($0.02–0.43)
- Pills (3-pack): $0.27 ($0.02–0.33)

**% who ever injected DMPA at shop**
- 0%

**% who referred clients to injection provider site**
- Hospital: 93%
- Health center: 6%
- Community: 1%

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**RESULTS**

Licensed Chemical Seller Shop Operators

- **Demographic characteristics.** Overall, the vast majority of our sample of licensed chemical seller shop operators were male (90%), and three-quarters were 40 or older (Table 1); on average, sellers were aged 48. Ninety percent reported that they lived in the community in which their shop was located. Of all the sellers had attended at least middle school (junior secondary school), and 22% had received some postsecondary education. All had the licensure issued by the Pharmacy Council to operate a licensed chemical seller shop, and 26% had additional qualifications, such as being a community health worker, health assistant or nurse.

- **Contraceptive knowledge.** A high proportion of sellers reported awareness of specific contraceptive methods (not shown), especially the injectable (96%), condoms (93%) and the pill (92%). Only one operator was unable to correctly state the length of effectiveness of the injectable. Sellers gave various answers as to common side effects of the injectable, but those mentioned by the greatest proportion of sellers were irregular menses (70%), followed by head-ache (62%) and weight gain (50%).

- **Contraceptive sales and referrals.** Sixty-four percent of the shop operators (57% in Amansie West and 79% in Ejisu-Juabeng) reported an increase in the volume of family planning clients during the intervention. Ninety-seven percent percent reported selling the injectable, 95% oral contra-