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Photo credit: Izla kaya bardavid, Ghana
Executive Summary
Ensuring access to quality implant removal services at term or at any other time of a woman’s choosing is key for the long-term success of contraceptive implant programs and, even more importantly, compliance with informed choice in contraceptive adoption and use [1]. Gains in modern contraceptive prevalence in Ghana coupled with increased accessibility and popularity of implants make ensuring access to implant removal services a salient need.

Both the Ghana Health Services (GHS) and Marie Stopes International in Ghana (MSIG), as well as the USAID/Ghana health team, have identified access to implant removal as an important element of program strengthening. The goal of this research was to generate evidence on the state of access to removal services for women receiving implants through the public sector in the Eastern and Ashanti regions, and through mobile outreach services in the Central and Western regions of Ghana.

We implemented a mixed-methods study including a quantitative phone survey with implant users and qualitative interviews with users and providers to explore access to and experiences obtaining implant removal services in Ghana.
Study results revealed that while three quarters of implant users who had ever tried to access removal were able to access removal within one week of first attempt, several gaps in knowledge as well as social and structural barriers impede removal access for some. For instance, while most users interviewed were aware of the number of rods and duration of protection of their implant (88-93%), most did not know the name of the implant (88-94%). Further, while most women were aware that they could have their implant removed before it expired (74-88%), many were unaware that they could access removal at facilities other than where they had the implant inserted (47-56%). Success in obtaining removal before the implant’s expiration date appears to depend on multiple factors, including a woman’s reasons for seeking removal and the provider’s professional opinion. Two reasons readily accepted by providers for removal before expiration included the desire to conceive or male partners mandating removal. High cost and inadequate provider training and equipment may also limit access in some cases.

Findings from this study inform our recommendations for programs to expand in-service training opportunities focused on implant provision (including removal procedures), counseling and management of side effects, and to ensure sufficient and cost-effective supplies for removal procedures available at facilities.
Introduction
Background

Over 20% of married contraceptive users in Ghana are currently using implants and this figure has grown rapidly in recent years [2]. Gains in implant popularity underscore a critical need for removal services in Ghana.

Anecdotal information from a variety of contexts points to potential weaknesses in service delivery programs related to implant removal, such as inadequate medical equipment, insufficient numbers of trained providers, excessive fees required for removal or provider bias against removal before product expiration. At present, however, systematic data on the accuracy or prevalence of potential barriers to removal that could inform strategies for strengthening implant services is lacking. Further, lack of access to removal services can be detrimental to method reputation.

*Access to implant removal at term or when a woman requests removal is a central element of quality family planning service provision and is necessary for voluntary programs.*
Implant use is widespread across Ghana. The introduction of Norplant in 1995 was followed by Jadelle in 2007, and by Implanon and Implanon NXT in 2012 and 2015, respectively. In the last 5 years, Ghana has received approximately 700,000 implants (Jadelle and Implanon/Nexplanon) making it one of the largest implant-procuring countries in the world [3]. The percent of contraceptive users using implants has increased in recent years.

**Percent of contraceptive users using implants**

<table>
<thead>
<tr>
<th>Year</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>2013 (PMA2020 R1)</td>
<td>13.3%</td>
</tr>
<tr>
<td>2014 (PMA2020 R2)</td>
<td>14.1%</td>
</tr>
<tr>
<td>2014 (PMA2020 R3)</td>
<td>12.6%</td>
</tr>
<tr>
<td>2015 (PMA2020 R4)</td>
<td>14.9%</td>
</tr>
<tr>
<td>2016 (PMA2020 R5)</td>
<td>18.3%</td>
</tr>
</tbody>
</table>

*Data from PMA2020 [2]*
In 2013, the Ghana Health Services (GHS) revised its policy on implant provision to allow Community Health Nurses (CHNs) to insert and remove contraceptive implants. In addition, access to contraceptive implants has been promoted through the outreach services of private organizations such as Marie Stopes International in Ghana (MSIG), which has been providing implants in their mobile outreach services since 2011 in Central and Western regions. These activities have since expanded to other regions and represent an important means of access for many rural clients.

Implants currently account for 28% of the modern contraceptive method mix in Ghana [2]. Approximately 70% of implant users in Ghana are using the two-rod, five-year implant, Jadelle, however use of Implanon/Implanon NXT is increasing [3].

† Data from PMA2020: https://www.pma2020.org/sites/default/files/PMA2020-Ghana-R6-FP-brief.pdf
Study objectives

To measure knowledge among implant acceptors of the possibility of removal before labeled duration and of where services could be obtained.

To clarify reasons for seeking removal.

To estimate the proportion of women ever wanting a removal who could get their implant removed at first attempt.

To document barriers to removals, with focus on information provision, service quality, geographic and economic access, and other psychosocial factors.
Our study team implemented a mixed methods study in the Ashanti, Eastern, Western and Central regions of Ghana to generate evidence on the state of access to removal services for women receiving implants through the public sector and through mobile outreach services.

**Quantitative Component:**
A cross-sectional phone survey of implant acceptors in GHS and MSIG regions and an exit survey with women getting implant removals from mobile teams in MSIG regions.

**Qualitative Component:**
In-depth interviews (IDIs) with a subset of implant acceptors and with family planning providers in GHS and MSIG regions.

**Population:** Women who had an implant inserted at age 18-49 during a pre-determined period at a GHS facility or through MSIG (phone survey and IDIs); women aged 18-49 who obtained removals from MSIG (exit); implant providers serving GHS and MSIG (IDIs).
Regional context

To capture dynamics surrounding access to implant removal services in different service delivery contexts while ensuring geographic and socio-cultural diversity, we conducted this study in two regions with public sector service delivery through GHS facilities and two regions with MSIG mobile outreach services. Specific regions were selected based on the presence of strong partner support with established client record systems. Selected regions included:

- Eastern and Ashanti regions for public sector delivery through GHS
- Central and Western regions for mobile outreach services provided by MSIG in partnership with GHS facilities.

Population Council worked with GHS to develop the Reproductive Services Log (rsLog), a mobile and web-based system that electronically captures family planning and reproductive health data from clinic registers. The rsLog has been in use since January of 2015 and is currently operational in 95 GHS facilities in Ashanti and Eastern regions, representing about 30% of the public sector facilities in these two regions. As of December 2016, just under 25,000 insertions were documented in the rsLog for these clinics.

MSIG has provided implant insertions and removals at GHS facilities as part of their outreach program in Central and Western regions since 2011, with one mobile team operating in each region. Since that time, approximately 25,000 clients in each of the two regions have received implants. In June 2014, MSIG implemented CLIC (Client Information Center), an electronic routine client-based information system. MSIG also established a call center, which offers services including counselling and follow up care.
Research approach: Quantitative component

**Phone Survey**

We administered a structured phone-based questionnaire with all implant acceptors and a longer version with women who indicated having ever wanted their implant removed.

We surveyed women aged 18-49 at the time of insertion, with a phone number in their records, who received an implant after January 2015 (GHS regions) or June 2014 (MSIG regions) and at least 3 months prior to study initiation in each region.

Phone survey results from GHS clients are highlighted in **RED** and results from MSIG clients are highlighted in **YELLOW** throughout the report.

**Theme areas addressed:**
Experiences with implant, client awareness of removal and counseling at insertion, experiences seeking removal, reasons removal not obtained, removal procedures and difficult removals

**Exit Survey**

We employed a structured exit survey to obtain information from women in MSIG regions who used the implant for a longer duration. Due to MSIG’s long history of implant provision in these regions, we were able to intercept women returning at the end of their implant’s labeled duration and/or maturity date.

Eligible women were between 18-49 years old during study recruitment, and obtained implant removal services through MSIG mobile outreach teams during one of the selected outreach outings.

Results from the exit survey conducted solely in MSIG regions are highlighted in **GREEN** throughout the report.

**Theme areas addressed:**
Experiences with implant, client awareness of removal and counseling at insertion, experiences seeking removal, reasons removal not obtained, removal procedures and difficult removals
Research approach: Qualitative component

We conducted IDIs to obtain more detailed understanding of circumstances affecting women’s ability to obtain removals, to determine ways to improve access, and to insights into possible constraints for service delivery. IDI results are highlighted in **BLUE** throughout the report.

We selected a subset of phone survey participants who represented four profiles:
1. Obtained removal at first attempt (success)
2. Obtained removal but not at first attempt (delayed success)
3. Made at least one attempt to get a removal but had not yet had their implant removed at the time of phone survey (not yet removed)
4. Wanted a removal but had not attempted removal (want, no try)

Similarly, we interviewed three types of providers:
1. Those performing insertions and removals at GHS facilities in GHS regions
2. MSIG-contracted FP providers performing implant insertions and removals in MSIG mobile outreach teams in MSIG regions
3. Primary FP providers in GHS facilities partnering with MSIG for outreach (i.e. outreach sites).

**Theme areas addressed:**
Experiences with implant, client awareness of removal and counseling at insertion, experiences seeking removal, reasons removal not obtained, removal procedures and difficult removals, provider needs
The study is **not** designed to support comparisons between public sector delivery and mobile outreach services contexts, due to differences in selection and recruitment procedures and because of possible underlying differences between regions.
Results
Results

- Participant characteristics
- Experiences with implant
- Client awareness of removal and counseling at insertion
- Experiences seeking removal
- Reasons removal not obtained
- Removal procedure and difficult removals
- Provider needs
Results: *Participant characteristics*
Phone survey response rate: Public sector

**Eastern Region**
- **Response rate = 64%**
  - Women selected from rsLog\(^1\) (n=7556)
  - Women with phone information in clinic records (n=1268)
  - Women agreed to be contacted by RA\(^2\) (n=608)
  - Completed interview (n=388)
  - Refused (n=1)
  - Not reached (n=158)

**Ashanti Region**
- **Response rate = 75%**
  - Women selected from rsLog\(^1\) (n=10343)
  - Women with phone information in clinic records (n=2355)
  - Women agreed to be contacted by RA\(^2\) (n=1029)
  - Completed interview (n=771)
  - Refused (n=5)
  - Not reached (n=157)

\(^1\) GHS Reproductive Service Electronic client database supported by Population Council with funding from R3M program
\(^2\) Research assistant

Recording of phone information varied substantially across sites.
Phone Survey Response Rate: Mobile Outreach

Central Region

Response rate = 83%

Women selected from CLIC\(^1\) (n=2699) → Women agreed to be contacted by RA\(^2\) (n=1096) → Completed interview (n=909) → Refused (n=16) → Not reached (n=197)

Western Region

Response rate = 82%

Women selected from CLIC\(^1\) (n=634) → Women agreed to be contacted by RA\(^2\) (n=201) → Completed interview (n=164) → Refused (n=3) → Not reached (n=44)

\(^1\) MSI Client Information Center electronic data system
\(^2\) Research assistant
## Phone & exit survey: Demographics

<table>
<thead>
<tr>
<th></th>
<th>PUBLIC ((n=1,159))^†</th>
<th>OUTREACH ((n=1,073))</th>
<th>EXIT SURVEY ((n=50))</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Age</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mean (years)</td>
<td>29.6 years</td>
<td>28.4 years</td>
<td>31.0 years</td>
</tr>
<tr>
<td>18-29 years</td>
<td>53.8%</td>
<td>63.1%</td>
<td>46.0%</td>
</tr>
<tr>
<td>30-39 years</td>
<td>36.8%</td>
<td>30.7%</td>
<td>42.0%</td>
</tr>
<tr>
<td>40-49 years</td>
<td>9.4%</td>
<td>6.2%</td>
<td>12.0%</td>
</tr>
<tr>
<td><strong>Marital Status</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Never married</td>
<td>21.4%</td>
<td>19.5%</td>
<td>30.0%</td>
</tr>
<tr>
<td>Married/Cohabitating</td>
<td>73.0%</td>
<td>76.4%</td>
<td>58.0%</td>
</tr>
<tr>
<td>Divorced/Widowed</td>
<td>5.6%</td>
<td>4.2%</td>
<td>12.0%</td>
</tr>
<tr>
<td><strong>Parity</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mean (n)</td>
<td>2.3 (n=1152)</td>
<td>2.6 (n=1062)</td>
<td>3.3 (n=47)</td>
</tr>
<tr>
<td>Highest education attended</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Primary</td>
<td>11.0%</td>
<td>15.5%</td>
<td>36.0%</td>
</tr>
<tr>
<td>JSS/Middle</td>
<td>51.8%</td>
<td>58.4%</td>
<td>42.0%</td>
</tr>
<tr>
<td>SSS/High School</td>
<td>21.7%</td>
<td>15.9%</td>
<td>0.0%</td>
</tr>
<tr>
<td>&gt;SSS</td>
<td>8.9%</td>
<td>4.7%</td>
<td>0.0%</td>
</tr>
<tr>
<td><strong>Religion</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Christian</td>
<td>92.3%</td>
<td>93.6%</td>
<td>92.0%</td>
</tr>
<tr>
<td>Muslim</td>
<td>7.4%</td>
<td>4.9%</td>
<td>6.0%</td>
</tr>
<tr>
<td><strong>Health insurance</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Percentage of population insured</td>
<td>62.7%</td>
<td>42.6%</td>
<td>16.0%</td>
</tr>
</tbody>
</table>

† All frequencies for public sector throughout presentation are unadjusted, percentages and means are adjusted for sampling weights.
## IDIs: Demographics

### Implant Acceptors (n=20)

<table>
<thead>
<tr>
<th>Current Cadre</th>
<th>Public (n)</th>
<th>Outreach (n)</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nurse</td>
<td>1</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Midwife</td>
<td>2</td>
<td>2</td>
<td>4</td>
</tr>
<tr>
<td>Community health nurse</td>
<td>3</td>
<td>4</td>
<td>7</td>
</tr>
<tr>
<td>Other</td>
<td>2</td>
<td>0</td>
<td>2</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Experience with insertion</th>
<th>Public (n)</th>
<th>Outreach (n)</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-2 years</td>
<td>5</td>
<td>1</td>
<td>6</td>
</tr>
<tr>
<td>3-5 years</td>
<td>0</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>6+ years</td>
<td>3</td>
<td>1</td>
<td>4</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Experience with removals</th>
<th>Public (n)</th>
<th>Outreach (n)</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>No experience</td>
<td>1</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>1-2 years</td>
<td>4</td>
<td>3</td>
<td>7</td>
</tr>
<tr>
<td>3-5 years</td>
<td>0</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>6+ years</td>
<td>3</td>
<td>0</td>
<td>3</td>
</tr>
</tbody>
</table>

### Implant Providers (n=15)

<table>
<thead>
<tr>
<th>Delayed success (removal at 2nd or later attempt)</th>
<th>Public (n)</th>
<th>Outreach (n)</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td>2</td>
<td>5</td>
<td>5</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Removal not yet obtained</th>
<th>Public (n)</th>
<th>Outreach (n)</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1</td>
<td>2</td>
<td>2</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Wanted but never attempted</th>
<th>Public (n)</th>
<th>Outreach (n)</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>3</td>
<td>3</td>
<td>3</td>
</tr>
</tbody>
</table>
**Type of implant reported by study participant**

Q (Phone & Exit). There are multiple types of implants available in Ghana. How many rods were in the implant you last had inserted? How many years did the provider tell you the implant can remain in before it needs to be removed?

<table>
<thead>
<tr>
<th>Type of Implant</th>
<th>Public (n=1159)</th>
<th>Outreach (n=1073)</th>
<th>Exit (n=50)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jadelle</td>
<td>61.9%</td>
<td>86.3%</td>
<td>84.0%</td>
</tr>
<tr>
<td>Implanon</td>
<td>29.8%</td>
<td>6.3%</td>
<td>4.0%</td>
</tr>
<tr>
<td>Unsure</td>
<td>8.3%</td>
<td>7.4%</td>
<td>12.0%</td>
</tr>
</tbody>
</table>

88-94% of respondents did not know the name of their implant

*Implant type determined by participant response to both number of rods and duration of protection as stated by provider; 2 rods & 5 years reported as Jadelle, 1 rod and 3 years reported as Implanon, any other response combination reported as unsure.
Q (Phone & Exit). Approximately how long has it been since the last time that you had an implant inserted?*

*Responses rounded to the nearest month.
Q (Phone). Have you yourself ever wanted to stop using your implant and have it removed? If yes, approximately how long was the implant in your arm before you wanted to stop using it and have it removed?

Proportion of implant users ever wanting removal and timing of desire

- **Public (n=1159)**: 32%
  - <1 mo: 1.6%
  - 1-11 mos: 12.2%
  - 12-23 mos: 17.7%
  - 24-35 mos: 21.3%
  - over 3 yrs: 38.2%
  - DK: 9.0%

- **Outreach (n=1073)**: 21%
  - <1 mo: 3.5%
  - 1-11 mos: 19.9%
  - 12-23 mos: 20.8%
  - 24-35 mos: 50.7%
  - over 3 yrs: 3.9%
  - DK: 10%
Key takeaways: Participant characteristics

❖ Participants were, on average, 30 years old, married, and had 2-3 children. The majority had at least a middle school education, though education was slightly lower among exit survey participants.

❖ Most participants used the two-rod, 5-year implant (*Jadelle*®). Notably, 7-12% of women across contexts did not know what type of implant they were using. Most did not know the name of their implant.

❖ Most phone survey participants had their implant for 1-2 years, therefore less than the labeled duration. Almost all 50 women interviewed in the exit surveys, however, had their implant for the labeled duration.

❖ Less than half of participants in the phone surveys reported ever wanting a removal. Among those reporting ever wanting a removal, most experienced this desire in the first year of use.
Results: *Experience with implant*
Most commonly reported reasons for wanting a removal

Q (Phone & Exit). What is the main reason why you have wanted to stop using your implant? Top three responses among all women who reported wanting a removal, regardless of outcome reported.

### Public (n=373)
- Side effects or health concerns (39.1%)
- Bleeding side effects (24.4%)
- Wanted children (18.7%)

### Outreach (n=231)
- Side effects or health concerns (50.7%)
- Bleeding side effects (22.9%)
- Wanted children (10.4%)

### Exit (n=50)
- Implant expired (n=36)
- Partner disapproves (n=4)
- Wanted children (n=4)
Experienced side effects or health concerns

Q (Phone). Have you experienced any side effects (other than bleeding changes) while using your implant? If yes, what other side effects have you experienced? % yes and top three responses reported. Multiple responses possible.

<table>
<thead>
<tr>
<th></th>
<th>Public</th>
<th>Outreach</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wanted removal</td>
<td>59.5%</td>
<td>69.7%</td>
</tr>
<tr>
<td>Never wanted removal</td>
<td>40.3%</td>
<td>38.0%</td>
</tr>
</tbody>
</table>

Most commonly reported non-bleeding side effects (top three responses)

<table>
<thead>
<tr>
<th>Public</th>
<th>Outreach</th>
</tr>
</thead>
<tbody>
<tr>
<td>n=227</td>
<td>n=315</td>
</tr>
<tr>
<td>Dizziness</td>
<td>Weight change</td>
</tr>
<tr>
<td>(47.1%)</td>
<td>(40.1%)</td>
</tr>
<tr>
<td>Weight change</td>
<td>Dizziness</td>
</tr>
<tr>
<td>(43.2%)</td>
<td>(50.3%)</td>
</tr>
<tr>
<td>Headaches</td>
<td>Weight change</td>
</tr>
<tr>
<td>(23.8%)</td>
<td>(26.5%)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Outreach</th>
<th>n=320</th>
</tr>
</thead>
<tbody>
<tr>
<td>n=161</td>
<td>n=320</td>
</tr>
<tr>
<td>Dizziness</td>
<td>Weight change</td>
</tr>
<tr>
<td>(38.4%)</td>
<td>(33.4%)</td>
</tr>
<tr>
<td>Weight change</td>
<td>Abdominal pain</td>
</tr>
<tr>
<td>(15.5%)</td>
<td>(15.9%)</td>
</tr>
</tbody>
</table>
### Experienced bleeding side effects

Q (Phone). Have you experienced any changes in your menstrual bleeding while using your implant? If yes, what changes have you experienced in your period? % yes and top three responses reported. Multiple responses possible.

<table>
<thead>
<tr>
<th></th>
<th>Public</th>
<th>Outreach</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wanted removal</td>
<td>85.2%</td>
<td>90.0%</td>
</tr>
<tr>
<td>(n=373)</td>
<td></td>
<td>(n=231)</td>
</tr>
<tr>
<td>Never wanted</td>
<td>75.6%</td>
<td>77.3%</td>
</tr>
<tr>
<td>removal (n=786)</td>
<td></td>
<td>(n=842)</td>
</tr>
</tbody>
</table>

#### Most commonly reported bleeding side effects (top three responses)

<table>
<thead>
<tr>
<th>Public n=315</th>
<th>Outreach n=651</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stopped having period (39.3%)</td>
<td>Stopped having period (48.9%)</td>
</tr>
<tr>
<td>Bleed more during period (37.6%)</td>
<td>Period lasts longer (24.3%)</td>
</tr>
<tr>
<td>Period lasts longer (26.0%)</td>
<td>Bleed less during period (24.3%)</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Women’s decisions to remove their implants were multifaced; apart from 2 women who chose to remove their implants only because they wanted to become pregnant, all clients cited more than one reason for wanting removal.

Over half of the women interviewed said bleeding side effects contributed to their decision to seek removal.

A few women said these changes impacted their work or relationship with their partner:

“Eeee, I don’t go to work for about two weeks. Because when I am experiencing my period, in the first two weeks it comes normal but the following two weeks going to one month it gets severe. And so when it happens like that I don’t go work. When it happens like that I stay at home... If I don’t go to work they don’t pay me.”

– 28 y/o woman with 3 children, delayed success
Half of the women reported that other side effects, such as headaches, heart palpitations, and fatigue, contributed to their decisions to remove:

“I was thinking, what have I put in my body and its doing me all this? I felt bad for it, yes. Because I wasn’t myself as I was before.”

- 34 y/o woman with 4 children, not yet removed

Women explained that the side effects they experienced interfered with their daily life, made them unable to work, or concerned their partners:

“Normally when you have severe headache you don’t want to listen... You can’t contain noise. You easily get upset because you want everyone to be quiet for you. It was terrible.”

- 33 y/o woman with 3 children, delayed success
Removal due to side effects

“I told them that I have grown lean. I grew very lean and my menses too doesn’t come normal as it used to in every other month. That is why I wanted to get it removed. Also, I usually get unconscious and when I walk for a while I get tired as if someone who got tired because he was running. That is why I want to get it removed... She told me to keep it for some time because I haven’t kept it for a long time and I wanted to get it removed. I said no and told her the way the problem is I don’t know what will happen to me if I keep it for a long time and so I wanted it removed... She didn’t tell me she wanted to give me medication. She said maybe if I waited for some time the problem will stop... I told her, no, I wanted to get it removed.”

-22 y/o woman with 1 child
<table>
<thead>
<tr>
<th></th>
<th>Public</th>
<th>Outreach</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Wanted removal</strong></td>
<td>Wanted removal</td>
<td>Wanted removal</td>
</tr>
<tr>
<td>(n=373)</td>
<td>(n=231)</td>
<td>(n=842)</td>
</tr>
<tr>
<td>40.5%</td>
<td>51.5%</td>
<td>29.8%</td>
</tr>
<tr>
<td><strong>Never wanted removal</strong></td>
<td>Never wanted</td>
<td>Never wanted</td>
</tr>
<tr>
<td>(n=786)</td>
<td>removal</td>
<td>removal</td>
</tr>
<tr>
<td>31.8%</td>
<td></td>
<td>29.8%</td>
</tr>
</tbody>
</table>

**Person influenced by (top three responses featured)**

- **Public**
  - Neighbor or friend: 54.9%
  - Husband or partner: 42.1%
  - Mother: 9.7%

- **Outreach**
  - Neighbor or friend: 83.5%
  - Husband or partner: 14.4%
  - Other person: 9.9%

Q (Phone). Has anyone tried to influence you to stop using your implant? If yes, who are the persons who tried to influence you to stop using your implant? % yes and top three responses reported. Multiple responses possible.
Many women described the role of their partner in the decision to seek a removal. Almost half of women said their partners influenced them to remove their implants after they experienced side effects:

“I was growing lean and I didn’t look nice before him. I didn’t look nice before him. And he has to feel good when he sees me.”
- 22 y/o woman with 1 child, successful at first removal attempt

Seven women reported that their partners “told” or “forced” them to go for removal:

“The only problem I was having with the method was the amenorrhea. Just two months of being on the method and not menstruating, my husband asked me about and told me to go and remove it for another method that can make my menstrual period normalize because it’s not good to accumulate dirty blood in my system. And because he’s my husband and he’s responsible for me, I had to respect his views... My husband is the one taking care of me so I had to obey him.” – 25 y/o woman with 2 children, delayed success

“But the last implant he forced me to remove I had not removed the plaster when I visited him, so he saw it fresh and since then he was always on my neck to remove it until I got it removed after just one month of insertion. Left to me alone, I would have waited another 5 years because I had three children then.”
- 34 y/o woman with 4 children, success at first removal attempt
In contrast, a few women reported that their partners either did not want the removal or supported their own decisions to remove without exerting pressure:

“He also thought that when I have it removed I wouldn’t do it again and I said no, I wanted to have it removed and inject the three months one. And he said ok, that will be fine.”

– 22 y/o woman with no children, delayed success
Key takeaways: Experience with implant

❖ Among all women who reported ever wanting a removal, most women cited side effects or health concerns as the main reason they wanted to stop using their implant.

❖ Women's decisions to remove their implants were multifaceted; nearly all implant acceptors participating in IDIs cited more than one reason for wanting a removal, with bleeding-related side effects most commonly influencing the decision to seek removal.

❖ Most women who reported having experienced bleeding changes said that they had stopped having their period while using the implant. Other commonly reported side effects included dizziness and weight change. Some women reported these side effects impacted their work or relationship with their partner.

❖ Among women who said that others had influenced them to stop using their implant, neighbors, friends or partners were most frequently identified. Few women reported that their partners either did not want the removal or that they supported their decision to remove without pressuring them.
Results: *Client awareness of removal and counseling at insertion*
### Awareness of early removal and where to access services

**Q1.** Were you ever told/did you ever hear you can have your implant removed early if you no longer want it?  
**Q2.** When you had your implant inserted, did the provider tell you that you can have your implant removed early?  
**Q3.** When you had the implant inserted, did the provider tell you that you could come back to the same place to have your implant removed? How about any other place to have your implant removed?

<table>
<thead>
<tr>
<th></th>
<th>Public (n=1159)</th>
<th>Outreach (n=1073)</th>
<th>Exit (n=50)</th>
</tr>
</thead>
</table>
| **Aware that implant can be removed before expiration**  
(Q1 (% yes))       | 88.2%          | 84.3%             | 74.0%       |
| **Told by provider at insertion that implant can be removed before expiration**  
(Q2 (% yes))       | 88.9% (n=1020) | 88.4% (n=905)     | 64.0%       |
| **Told at insertion where removal can be obtained**  
(Q3 (see legend))  |                 |                   |             |

#### Pie Charts

- **At insertion place**  
- **Place other than insertion place**  
- **At insertion and another place**  
- **Not told about any place/ don't know**
Q (Phone). Your provider may have told you some reasons you can get the implant removed earlier than scheduled. For what reasons did the provider tell you that the implant can be removed earlier than scheduled? Top four most commonly reported reasons among women told by a provider they can have their implant removed early reported. Multiple responses possible.

**Public (n=923)**
- **Want children (69.9%)**
- **Side effects (60.5%)**
- **Any reason (26.0%)**
- **Partner disapproves (9.9%)**

**Outreach (n=800)**
- **Want children (62.6%)**
- **Side effects (62.0%)**
- **Any reason (24.9%)**
- **Partner disapproves (9.5%)**
• Most providers said they tell clients they can have implants removed prior to the expiration date.
  • Of these, many said they tell women they can have their implant removed early if they wish to conceive:

  “With the implant, what I normally do is, when I insert it for you, I tell...them it’s not because they’ve stated three years you should use it for three years. If you want to conceive in a year or two, you can come for your removal. That is what I normally tell them.”
  – Community health nurse, 1 yr. experience providing implants

• Several providers said they tell women they can remove the implant at any time for any reason:

  “...Like I tell them that any time you want to remove it, it would be there for five years, fine, but any time you feel you don’t want it, so you want to remove, you can come and remove it.”
  – In-charge of Reproductive and Child Health, 2 yrs. experience providing implants
Key takeaways: Client awareness of removal and counseling at insertion

❖ Knowledge of the possibility of removal before labeled duration and where to obtain removal is high, but not 100%.

❖ A large proportion of women (33-46%) were only told about coming back to the same place for a removal.

❖ Most providers said they tell clients they can have implants removed prior to the expiration date. Among women told by a provider they could have their implant removed early, providers most commonly cited wanting children (63-70%) or side effects as valid reasons for early removal.

❖ Several providers said they tell women they can remove the implant at any time for any reason.
Results: Experience seeking removal
Removal outcomes

Among women who have ever **wanted** removal

- **Successful removal** = Removal on 1\textsuperscript{st} attempt
- **Delayed success** = Removal after 1\textsuperscript{st} attempt
- **Not yet removed** = Removal not yet attempted
- **Did not attempt** = Removal not attempted

### Public (n=373)
- Successful removal: 56%
- Delayed success: 28%
- Not yet removed: 8%
- Did not attempt: 8%

### Outreach (n=231)
- Successful removal: 31%
- Delayed success: 43%
- Not yet removed: 13%
- Did not attempt: 13%

**Average number of attempts (range)**

- **Public**
  - Delayed success: 2.4 (range 2-8)
  - Not yet removed: 2.0 (range 1-11)

- **Outreach**
  - Delayed success: 2.5 (range 2-12)
  - Not yet removed: 1.4 (range 1-4)
Most commonly reported reasons for NOT trying to remove implant

Q (Phone). What is the main reason why you did not try to have your implant removed? Top four responses among women who wanted removal but did not try reported.

Public (n=34)

- No time or too busy (n=17)
- Changed mind or wanted to keep (n=9)
- Too far (n=2)
- Too expensive (n=1)

Outreach (n=99)

- Changed mind or wanted to keep (n=36)
- Too expensive (n=16)
- No time or too busy (n=10)
- Too far (n=1)
Removal outcomes

Among women who attempted a removal

Public (n=338)

- Removal at first attempt: 61%
- Removal >1 week after first attempt: 17%
- Removal within 1 week of first attempt: 14%
- Not yet removed, want to keep: 2%
- Not yet removed, want to remove: 2%
- Range: 2-68 weeks

Outreach (n=132)

- Removal at first attempt: 55%
- Removal >1 week after first attempt: 17%
- Removal within 1 week of first attempt: 5%
- Not yet removed, want to keep: 7%
- Not yet removed, want to remove: 23%
- Not yet removed, don't know if want to keep: 14%
- Range: 2-20 weeks
Location of first removal attempt

Q (Phone & Exit). Was the first place you went to try to have your implant removed the same place where you had it inserted or a different place? % per location among women who tried to obtain a removal reported.

- **Public** (n=339): 80% same, 20% different
- **Outreach** (n=131): 72% same, 28% different
- **Exit** (n=50): 62% same, 28% different, 10% unsure

Over half of all respondents who attempted removal at a place other than where they had the implant inserted said they didn’t return to the insertion site because it was too far away.
Location of removal

Q (Phone). Did you have your implant removed at the same place where you had it inserted, or did you have it removed at a different place? % per location among women who obtained a removal reported.

- **Public (n=314)***
  - Same place as insertion: 81%
  - Different place than insertion: 19%

- **Outreach (n=101)***
  - Same place as insertion: 70%
  - Different place than insertion: 30%

**Facility where removal was obtained**

Q (Phone). If you obtained your removal from a place other than your insertion location, where was your implant removed? Top two locations reported.

<table>
<thead>
<tr>
<th>Facility</th>
<th>% (n=52)</th>
<th>% (n=30)</th>
</tr>
</thead>
<tbody>
<tr>
<td>GHS facility</td>
<td>86.4</td>
<td>83.3</td>
</tr>
<tr>
<td>Private facility</td>
<td>11.7</td>
<td>13.3</td>
</tr>
</tbody>
</table>
Number of places tried for removal

Among women who made more than one attempt at removal, regardless of outcome of removal attempt

<table>
<thead>
<tr>
<th>Number of Places Tried</th>
<th>Public (n=112) %</th>
<th>Outreach (n=37) %</th>
</tr>
</thead>
<tbody>
<tr>
<td>One care facility</td>
<td>89.2</td>
<td>78.4</td>
</tr>
<tr>
<td>Two care facilities</td>
<td>10.8</td>
<td>18.9</td>
</tr>
<tr>
<td>Three or more care facilities</td>
<td>--</td>
<td>2.7</td>
</tr>
</tbody>
</table>
### Cost of Removal Services

**Among women who had their implant removed**

<table>
<thead>
<tr>
<th></th>
<th>Public</th>
<th>Outreach</th>
<th>Exit</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Reported incurring cost</strong></td>
<td><img src="#" alt="Pie Chart" /></td>
<td><img src="#" alt="Pie Chart" /></td>
<td><img src="#" alt="Pie Chart" /></td>
</tr>
<tr>
<td></td>
<td>75%</td>
<td>84%</td>
<td>90%</td>
</tr>
<tr>
<td></td>
<td>25%</td>
<td>16%</td>
<td>10%</td>
</tr>
<tr>
<td><strong>Mean cost (Cedis)</strong></td>
<td>15.0 (8.5)</td>
<td>24.6 (11.6)</td>
<td>17.0 (9.7)</td>
</tr>
<tr>
<td>(e.g. supplies, provider fee)</td>
<td>Mean (SD)</td>
<td>Mean (SD)</td>
<td>Mean (SD)</td>
</tr>
<tr>
<td><strong>Reported incurring transport cost</strong></td>
<td>70.6%</td>
<td>55.5%</td>
<td>20%</td>
</tr>
<tr>
<td><strong>Mean cost (Cedis) for transport</strong></td>
<td>5.0 (3.5)</td>
<td>5.3 (4.9)</td>
<td>3.0 (1.6)</td>
</tr>
<tr>
<td>Mean (SD)</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*GHS official cost of removal: 2 Ghana Cedis*
Nearly half of all clients in both contexts reported that an early implant removal was more expensive than removal at labeled duration:

“If the time isn’t up and I want to remove it and I come they will charge. But if the five years reaches and I am coming to remove it, it’s free.”
- 33 y/o woman with 3 children, delayed success

“Yes, he explained that the removal procedure was generally free at due date but I was charged because I was removing it before the due date.”
- 37 y/o woman with 3 children, delayed success

A quarter of clients, particularly in the outreach context, expressed that cost limited their access to removal, including one client who had her implant partially removed and could not afford to remove the remaining piece:

“I want to try a different place, but my problem is, I don’t want to pay any money for it again.”
- 34 y/o woman with 4 children, not yet removed
One outreach provider suggested that partner clinics are eager to provide removals in order to collect the removal fee, and will perform removals immediately prior to outreach teams arriving so as not to miss out on the fees.

“...Our co-partners, because they are collecting that huge, huge money... If I do three a day, how much is it? GH¢60... And is going into their pockets. So irrespective of the complaints that the clients is giving, they would take it off... We went to one of the facilities. They knew we were coming there. We’ve made an announcement, the people are there. These are clients who coming to do removal and reinsertion. They were in because they heard our coming. And at the end of the day, these [clinic providers] did three removals, collected GH¢20 each, covered the incision site and told the clients wait for us to come and do the insertion.”

-Outreach region, Midwife, 5 yrs experience with implants
**Method uptake at time of removal**

Q (Phone & Exit). When you had your implant removed, did you start using another method of family planning? If yes, what method did you start using? % yes and % per method among women who reported using a method after implant removal.

<table>
<thead>
<tr>
<th>Method Used</th>
<th>Public (n=314)</th>
<th>Outreach (n=101)</th>
<th>Exit (n=50)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>35% (n=116)</td>
<td>29% (n=29)</td>
<td>66% (n=33)</td>
</tr>
<tr>
<td>Injectable</td>
<td>60.2%</td>
<td>72.4%</td>
<td>0.0%</td>
</tr>
<tr>
<td>Pill</td>
<td>24.8%</td>
<td>24.1%</td>
<td>0.0%</td>
</tr>
<tr>
<td>Emergency Contraception</td>
<td>11.1%</td>
<td>3.5%</td>
<td>0.0%</td>
</tr>
<tr>
<td>IUD</td>
<td>2.4%</td>
<td>0.0%</td>
<td>3.0%</td>
</tr>
<tr>
<td>Implant</td>
<td>0.7%</td>
<td>0.0%</td>
<td>93.9%</td>
</tr>
<tr>
<td>Female Sterilization</td>
<td>0.0%</td>
<td>0.0%</td>
<td>3.0%</td>
</tr>
</tbody>
</table>
Unmet need after implant removal

Q (Phone & Exit). What is the **main** reason why you did not start using another method of family planning (FP)? Most common reasons for non-adoption **among women who no longer have implant and did not adopt another FP method** reported.

<table>
<thead>
<tr>
<th>Reason</th>
<th>Public (n=198)</th>
<th>Outreach (n=72)</th>
<th>Exit (n=16)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wanted to get pregnant</td>
<td>37.4%</td>
<td>18.1%</td>
<td>25.0%</td>
</tr>
<tr>
<td>Side effects/health concerns</td>
<td>34.8%</td>
<td>36.1%</td>
<td>12.6%</td>
</tr>
<tr>
<td>Lost partner/partner away</td>
<td>11.2%</td>
<td>6.9%</td>
<td>0.0%</td>
</tr>
<tr>
<td>Partner disapproves</td>
<td>3.9%</td>
<td>11.1%</td>
<td>31.3%</td>
</tr>
<tr>
<td>Inconvenient</td>
<td>1.3%</td>
<td>4.2%</td>
<td>18.8%</td>
</tr>
<tr>
<td>Other unspecified</td>
<td>4.6%</td>
<td>16.7%</td>
<td>6.3%</td>
</tr>
</tbody>
</table>

**Unmet Need for FP After Implant Removal:** Among all women who had their implant removed, what proportion did not adopt another method of FP for a reason other than desiring pregnancy?

- **Public**: 47%
- **Outreach**: 63%
- **Exit**: 26%
Key takeaways: Experience seeking removal

❖ Among those who attempted removal, roughly 75% in both the public and outreach settings, were able to remove their implant within one week.

❖ More than 40% of women in outreach settings who desired removal did not attempt removal.

❖ Most women who tried to obtain a removal first went to the same place they had their implant inserted; over 50% of respondents who attempted removal at a different place said they didn't return to the insertion site because it was too far away.

❖ Most women who successfully obtained removals did so at the same place they had their implant inserted or at a different GHS facility.

❖ The cost of implant removal varies across facilities. Nearly half of all clients participating in IDIs in both contexts reported that an early implant removal was more expensive than removal at labeled duration.

❖ Among women who successfully removed their implant, most did not start another FP method in public and outreach facilities. Among those who did, injectable contraceptives were most commonly selected. Most outreach clients received a new implant.

❖ 47% and 63% of women discontinuing implant use early may have an unmet need for FP in the public and outreach settings, respectively.
Results: Reasons removal not obtained
## Removal visit experiences

**Among women who attempted removal regardless of outcome**

<table>
<thead>
<tr>
<th>% reporting YES</th>
<th>Public (n=339)</th>
<th>Outreach (n=132)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Has there been a time when you went to have your implant removed but you could not get a removal because...</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The provider counseled you to continue to use?</td>
<td>20.6</td>
<td>16.7</td>
</tr>
<tr>
<td>A provider was not available?</td>
<td>8.6</td>
<td>16.7</td>
</tr>
<tr>
<td>The provider would not remove your implant even though you wanted it removed?</td>
<td>11.5</td>
<td>10.6</td>
</tr>
<tr>
<td>The provider was unable to remove your implant even though he/she tried?</td>
<td>0.7</td>
<td>4.6</td>
</tr>
<tr>
<td>The provider tried to feel the implant in your arm, but could not find it/feel it?</td>
<td>4.4</td>
<td>13.5</td>
</tr>
</tbody>
</table>
Most commonly reported reasons provider gave for not removing implant

Q (Phone). What reason did the provider give you for not removing your implant? Top four responses among women who reported her provider would not remove even though she wanted removal reported. Multiple responses possible.

Public (n=37)

- Should not have removed (n=18)
- Has not had implant long enough (n=8)
- Not enough time to do removal (n=7)
- Other unspecified (n=2)

Outreach (n=14)

- Should not have removed (n=6)
- Not enough time to do removal (n=2)
- Other unspecified (n=2)
- Has not had implant long enough (n=1)
### Reasons for not obtaining removal (IDIs)

- During in-depth interviews, women reported they were usually given a specific reason that the provider would not remove their implant.

- They were often told to come back at a later date, either because no provider was available or because the Outreach team was not present:

  "When I went they told me that the nurse who is supposed to do it for me is not around... They said that she will come in 3 days’ time. And so I went back there in 3 days’ time and they asked me what was my problem and I explained everything to them. And so they removed it for me."

  – 38 y/o woman with 3 children, delayed success

- A few clients were told that they had to return to the clinic where their implant was inserted for removal:

  "She told me that as for removal she won’t remove it for me. She asked where I had it inserted... and she asked me to go there and have it removed."

  – 25 y/o woman with 1 child, delayed success
Nearly all providers felt that early removals were appropriate in the case of severe side effects such as excessive bleeding, heart palpitations or high blood pressure. Several providers said they always try to treat side effects prior to removing an implant:

“First of all, you try to counsel the client upon what reason the person gave. But when you come the first day, we wouldn’t do it for you the first day. If it’s bleeding, we will try the brufen or the microgynon and then if still you go and come back and say it didn’t help you, so still you want to remove, then we do it for you.”

– Disease control officer, 7 yrs. experience providing implants

Two-thirds of providers described the importance of counseling when women come for early removals, with some stating that potential side effects may not have been properly explained at insertion.

Providers and clients both described demand by husbands/partners for removal as a reason for early removal.
• About half of providers said that it was appropriate to do an early removal if a client wished to get pregnant; however, a few said they made judgement calls about if a client is “ready” to have another child before removing:

“…Only if the person is ready to cater for the child and also we also look at the age of the last baby before the insertion.”
– Registered community nurse

• A few providers also described making judgement calls about whether side effects were severe enough or enough time had lapsed for a removal:

“When asked why, she said, ‘I don’t experience my menses and because of that my boyfriend has left me and so I want to remove it. But I am not worried because he left me but I am worried because I don’t experience my menses as a result of the implant’. And I said, ‘I won’t remove it for you.’ Because it’s just three months, I can’t take it off for you.’”
– Community health nurse, 1 yr. experience providing implants
Key takeaways: Reasons removal not obtained

❖ Few women seeking removal (11% in public and 5% in outreach) reported being turned away because the provider refused to remove or said they hadn’t had their implant long enough.

❖ A woman’s success obtaining an early removal depends on multiple factors, including her reasons for removal and the provider’s professional opinion.

❖ Nearly all providers felt early removals were appropriate in the case of severe side effects (i.e. excessive bleeding).

❖ Two reasons for early removal are readily accepted by providers on demand: wanting to conceive and a partner wanting removal.
Results: Removal Procedure & Difficult Removals
Overall removal experience

Q (Phone & Exit). Please think about your entire experience getting your implant removed. This includes when you decided you wanted your implant removed until you got it removed. Overall, would you describe your experience as very easy, somewhat easy, somewhat difficult, or very difficult? % per response among women who had their implant removed reported.
Q (Phone). Did you have any problem with the place on your arm where the implant was removed? If yes, what problem(s) did you experience? % yes and % experiencing specific problems among women who had their implant removed. Multiple responses possible.

<table>
<thead>
<tr>
<th>Problem experienced</th>
<th>Public (n=314)</th>
<th>Outreach (n=101)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Temporary pain at time of removal</td>
<td>32.3%</td>
<td>36.6%</td>
</tr>
<tr>
<td>Pain that lasted a few days</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Scarring</td>
<td>43.6</td>
<td>46.0</td>
</tr>
<tr>
<td>Infection/ swelling</td>
<td>35.2</td>
<td>35.1</td>
</tr>
<tr>
<td>Continued pain</td>
<td>5.1</td>
<td>5.4</td>
</tr>
<tr>
<td>Other unspecified</td>
<td>0.0</td>
<td>5.4</td>
</tr>
</tbody>
</table>
About half of the participants who had attempted removal, particularly in the public context, reported that the removal procedure was easy or not painful:

“Yes, when he was removing it, I barely felt what he was doing, he really made me feel at home... I was satisfied with how he did it. He was gentle with me and the other nurses didn’t misbehave towards me.”

– 37 y/o woman with 3 children, delayed success

Almost the same number, but more equally split between contexts, reported that removal was difficult, painful, or took a long time.

Four women (2 in each context) experienced broken rods, deep removals, or non-palpable removals, and at least 2 women still had at least part of a rod in their arms at the time of the interview.
“[The removal took] hours not minutes. Hours because they kept at it long. It entered my muscles and so they kept long, I won’t lie to you. I didn’t know it would be that painful. I really felt the pain. When I got to the house my dress was wet with blood. The whole of my body.... This part [pointing to one side of her body] was soiled with blood. I wore a sleeveless dress and the whole of this part was wet with blood. And so I covered that part with the bag I took along either than that people will be asking to know what happened. [The respondent looked very sad and disturbed over what she went through]...As for the wound it kept long. I felt the pain for about one week. It even lasted for more than one week, it lasted for a long time.”

– 38 y/o woman with 2 children, not yet removed

“More than thirty minutes. If I say thirty minutes its small. They were.... The nurse was tired. Somebody would just clean the sweat. She would be there, wait, wait small and try again next.... To no avail. The injection went off. It went off, she is supposed to inject again. To no avail. [The nurse] said I should go for maybe one month. If the wound is healed then I come back... I was shouting... I went with my daughter. She was outside. She run inside to check what was happening to me.”

– 34 y/o woman with 4 children, not yet removed
All 7 providers from the public context reported experiences with broken, bent rods or fragments.

Many providers blamed the frequency of difficult removals on poor insertion by other providers, including implants being inserted into muscles or in the wrong part of the body (shoulder):

“If maybe during the insertion, it has been done too deeply. And usually, it’s those cases from the North and I don’t blame them too much...because maybe where [the nurse] is, she is alone. After the training, there is nobody at the facility to be guiding her to do the insertions.”

– Midwife, 2 yrs. experience providing implants

Just over half of the providers reported having referred a removal, either to another facility or to an in-charge, or seeking guidance or assistance from other facility staff for difficult removals.

A third of the providers mentioned using X-rays, “scans”, or MRIs to detect implants, or mentioned referring clients to facilities where these services are available.
Key takeaways: Removal procedure & difficult removals

❖ Among women who had their implant removed, 74% and 68% of those obtaining their implant in the public and outreach settings, respectively, reported that their overall removal experience was “easy” or “very easy”.

❖ Some women participating in IDIs reported the removal was difficult, painful or took a long time.

❖ A minority of women reported problems at their implant removal site, 32% and 37% in public and outreach facilities, respectively. Among women who reported problems, temporary pain at the time of removal, pain lasting a few days and scarring were most commonly reported.

❖ All providers that participated in IDIs from the public context reported experiences with broken, bent rods, or fragments.

❖ Difficult removals may present a challenge for clients and providers.
Results: Provider Needs
Nearly all the providers indicated they felt confident with removals, due to training and experience.

However, a third of the providers, particularly in the public context, reported they did not feel confident with difficult removals:

“Sometimes if I don’t feel it, I don’t want to do it.”
– Nurse, 1 yr. experience providing implants

Most providers stated they needed or would welcome additional training, with an equal number specifically mentioning additional training on counseling and removal:

“With removal, it involves a lot... Going into the skin, if you don’t take care you might even infect it. And then if the insertion is too deep...you might even be damaging some veins, which can lead to blood loss or other things. At least if I’m able to get the training, at least I will get the necessary skills that I will be able to do the removal without damaging any tissue or any of this thing.”
– Registered community nurse
Nearly all providers expressed a need for additional equipment/instruments to perform removals. About half of the providers said they had insufficient forceps:

“There is a curved one which...makes removal very simple. That one, ours most of the curved ones, is broken.”

– Sub-metro head, 10+ yrs. experience providing implants

A third of the providers reported needing autoclaves or other sterilization equipment.

Two providers said that instruments were their main challenge with providing removals:

“For now I don’t have any real challenges. No, unless the equipment, I need plenty equipment.”

– In-charge of Reproductive and Children’s Health, 2 yrs. experience providing implants
Key takeaways: Provider needs

❖ Though nearly all providers indicated they felt confident performing removals due to training and experiences, nearly one third (particularly in the public context) reported they did not feel confident with difficult removals.

❖ Providers expressed need for additional equipment and training opportunities.
Conclusions & Recommendations
Conclusions

- Most women in this study knew the number of rods and duration of protection of their implant even though they did not know the name of their implant.

- Most women in this study had their implant <18 months; experiences may be different among women who have had their implant longer.

- Knowledge of the possibility of early removal and where to obtain removal is high, but not 100%.

- A large proportion of women (33-46%) were only told about coming back to the same place for a removal.

- Just over a quarter of women across service delivery contexts had ever wanted to have their implant removed.

- Side effects are the predominant reason for desiring early removal.
Conclusions

- Among those who attempted removal, ~3/4 in both the public and outreach settings were able to remove their implant within one week.
- More than 2/5 of women in outreach settings who desired removal did not attempt removal.
- Few women seeking removal (11% in public and 5% in outreach) reported being turned away because the provider refused to remove or said they hadn’t had their implant long enough.
- The cost of implant removal varies across facilities.
- Influences from others including husbands/partners were often important in removal decision-making.
- 47% and 63% of women discontinuing implant use early may have an unmet need for FP in the public and outreach settings, respectively.
Conclusions

*From the qualitative results, suggestive but not necessarily generalizable...*

- A woman’s success obtaining an early removal depends on multiple factors, including her reasons for removal and the provider’s professional opinion.

- Two reasons for early removal are readily accepted by providers on demand: wanting to conceive and a partner wanting removal.

- Providers’ reasons for refusing to remove may be benevolent (for example wanting to protect women from unwanted pregnancy) but they may deny women control.

- Difficult removals may present a challenge for clients and providers.

- Providers have need for additional equipment and training opportunities.
Strengths and limitations

**Strengths**

- High study response rate despite challenging design (i.e. phone-based survey design)
- Population comprised of representatives from multiple regions in Ghana with diverse demographics
- Mixed-methods study design enabled deeper dive into user- and provider-related issues regarding access to implant removal.
- Provides evidence that can help program managers in Ghana identify challenges and opportunities for strengthening contraceptive implant service provision, including removal services
- Potential to provide useful lessons for other countries and may be important for settings with relatively “young” programs rapidly scaling-up implant provision

**Limitations**

- Eligibility criterion that women have phone information available in their record introduces potential risk of selection bias and may exclude poorest women from participation
- Not designed to support comparisons between GHS and MSIG regions
- Most women interviewed in the exit survey are likely women returning at the end of the labeled implant duration and not necessarily representative of implant users generally
- Possibility of recall bias among women participating in the implant acceptor and exit surveys as well as IDIs
Recommendations

- Expand in-service training opportunities focused on implant provision, including removal procedure.
- Review implant training curricula for improved focus on counseling and management of side effects.
- Develop strategies for engaging partners/husbands & friends/family in family planning decision-making including implant adoption and continuation.
- Identify and engage satisfied clients as FP champions.
- Assess and streamline charges for family planning services including implant removal services.
- Conduct additional research to determine the extent, causes, and consequences of difficult removals.
- Ensure sufficient supplies for removal procedures at all facilities.
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