EXPANDING CONTRACEPTIVE OPTIONS FOR POSTPARTUM WOMEN IN ETHIOPIA: INTRODUCING THE POSTPARTUM IUD

Provision of voluntary contraceptive services during the postpartum period enables women and couples to avoid unintended pregnancy and yields positive health dividends for both the mother and newborn. Until recently, the copper-bearing intrauterine device (IUD) was the only long-acting, reversible contraceptive method recommended for use by breastfeeding women, making it an important option for postpartum family planning (PPFP). Yet, in Ethiopia’s public health sector, the postpartum IUD (PPIUD) has been nearly absent from the contraceptive method mix, inhibiting full and informed contraceptive access and choice. Since 2013, Pathfinder International has been working with the government of Ethiopia to introduce and expand access to PPIUD services in the public sector through the USAID-funded Integrated Family Health Program (IFHP+) (2008–present). This technical brief explores: the process through which IFHP+ expanded availability of PPFP, including the PPIUD; challenges encountered and lessons learned throughout this process; and the profile of a typical PPIUD acceptor in IFHP+’s sample of clients in order to inform future interventions.
Context

Postpartum family planning (PPFP) can both improve health outcomes and enable women and couples to achieve their reproductive intentions. Rapid repeat pregnancies (defined as those occurring within two years of a previous pregnancy) are associated with a heightened risk of maternal and neonatal morbidity. Given these risks, the World Health Organization (WHO) recommends that pregnancies be spaced by at least 24 months; yet in Ethiopia, nearly half (47 percent) of postpartum women have short (<23 months) birth-to-pregnancy intervals.

Globally, the two-year period following a birth is correlated with a particularly high unmet need for contraception. A recent analysis of Demographic and Health Survey data found that 61 percent of postpartum women in 21 low- and middle-income countries have a prospective unmet need; in Ethiopia, this rises to a full 74 percent (47 percent for spacing and 27 percent for limiting). These figures suggest a critical gap in contraceptive service delivery during the postpartum period.

Until recently, the copper-bearing intrauterine device (IUD) was the only long-acting, reversible contraceptive method recommended by the WHO for immediate use among women who are breastfeeding. Offered as part of a range of contraceptive methods while ensuring informed consent and voluntary choice, the postpartum IUD (PPIUD) is an important option for women aiming to space subsequent pregnancies. In Ethiopia, however, the PPIUD has been nearly absent from the contraceptive method mix.

Compelled by both unmet need estimates and health outcomes for women and their infants, the global sexual and reproductive health (SRH) community has expressed renewed interest in PPFP—including the PPIUD—in recent years. In 2013, the WHO released guidance for designing PPFP programs and interventions, and a number of SRH organizations are implementing PPFP programming across a range of diverse settings and generating important evidence.

The WHO PPFP guidance, a recent literature review, and programmatic experience speak to the value of integrating PPFP into the continuum of maternal and newborn health (MNH) care, rather than introducing it as a standalone intervention. This includes counseling women on PPFP during antenatal care (ANC), ensuring access to contraception immediately following delivery with a skilled birth attendant, and embedding PPFP follow-up into postnatal care (PNC) and infant care.

When can a copper-bearing IUD be inserted?

**POSTPARTUM**
- **Postplacental:** within 10 minutes after delivery of the placenta
- **Immediate postpartum:** 10 minutes to 48 hours following delivery
- **Intraccesarean:** prior to closing the uterine incision during a cesarean section

**INTERVAL**

*Any other time as long as the woman is not currently pregnant and at least four weeks have passed since a prior delivery*

Project Context

Funded by the USAID-supported, Pathfinder-led Evidence to Action Project (E2A) and jointly implemented by Pathfinder and John Snow, Inc., the Integrated Family Health Program (IFHP+) supports the government of Ethiopia’s integrated model for strengthening voluntary contraception; SRH; and maternal, newborn, and child health services. Covering 40 percent of the Ethiopian population, IFHP+ operates in 40 districts of the four major regions of Amhara, Oromia, Tigray, and Southern Nations, Nationalities, and People’s Region (SNNPR), and to a lesser extent in Benishangul Gumuz and Somali regions. IFHP+ began in 2008 as a five-year
project, but has since received a three-year extension, allowing the program to build on its well-established foundation and programmatic achievements.

As Table 1 shows, when IFHP+ began in 2008, key baseline indicators associated with the continuum of MNH care in the program’s catchment area were particularly poor. Given baseline findings, the program prioritized supporting the government to strengthen the MNH continuum as the foundation for any further program initiatives. By IFHP+’s original endline date (2013), improvements could be seen across the continuum in project sites: skilled birth attendance increased from 6.5 to 35.9 percent; the percent of women who completed four ANC visits rose from 14.7 to 41 percent; PNC uptake jumped from 1.1 to 24.9 percent; contraceptive prevalence increased from 27.4 to 39.1 percent; and long-acting method use (implants and IUDs) rose from 0.8 to 6.3 percent. The substantial improvements across these key indicators from 2008 to 2013 (especially the marked increase in skilled birth attendance) created an opportunity for IFHP+ to expand access to PPFP, including the PPIUD, in its remaining program years.

To introduce PPIUD services, IFHP+ built on its experience supporting the government’s broader interval IUD (i.e., an IUD that is inserted at any time as long as the woman is not pregnant, and at least four weeks following a previous delivery) initiative. Since 2011, the program has worked closely with public sector health facilities, woreda heads, and health office managers to train clinicians on interval IUD insertion and removal, generate demand for services, and counter myths and misconceptions about the IUD within communities. Through this initiative, IFHP+ supported 866 health centers (68 percent of all health centers in the IFHP+ catchment area) to introduce interval IUD services from December 2011 to September 2015, and scale-up continues to date.” Nesting PPIUD services within this broader initiative enabled timely initiation of services by providers already familiar with interval IUD insertion and removal techniques.

Implementation Planning

Given that the PPIUD had been largely absent from the method mix in Ethiopia, IFHP+ planned to initially pilot introduction of the method in 17 program-supported health centers from July to September 2013. After this three-month period, the program then planned to use lessons learned from the pilot to expand services to an additional 32 health centers from September 2013 to September 2014. Lastly, because very little is known about the profile of a typical PPIUD user in Ethiopia, IFHP+ reviewed sociodemographic data from a sub-set of PPIUD acceptors during this 14-month period (July 2013–September 2014) in order to inform future interventions.

In March 2013, IFHP+ selected 17 health centers (7 in Oromia, 4 in Amhara, 3 in SNNPR, and 3 in Tigray) to introduce PPIUD services during the initial pilot period (July–September 2013). These health centers were selected by the relevant Federal Ministry

### TABLE 1: INDICATORS PERTAINING TO POSTPARTUM FAMILY PLANNING IN IFHP+-SUPPORTED SITES

<table>
<thead>
<tr>
<th>INDICATOR</th>
<th>2008 (PROJECT BASELINE)</th>
<th>2013 (ORIGINAL PROJECT ENDLINE DATE)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Percent of married women aged 15-49 currently using a modern contraceptive method</td>
<td>27.4%</td>
<td>39.1%</td>
</tr>
<tr>
<td>Percent of married women aged 15-49 currently using a long-acting contraceptive method (implant or IUD)</td>
<td>0.8%</td>
<td>6.3%</td>
</tr>
<tr>
<td>Percent of mothers of children aged 0-11 months who had four or more antenatal care visits at a health facility during pregnancy</td>
<td>14.7%</td>
<td>41%</td>
</tr>
<tr>
<td>Percent of mothers with children aged 0-11 months who delivered with a skilled health professional (excluding HEWs)</td>
<td>6.5%</td>
<td>35.9%</td>
</tr>
<tr>
<td>Percent of mothers of children aged 0-11 months who report receiving postpartum check within 2 days of birth</td>
<td>1.1%</td>
<td>24.9%</td>
</tr>
</tbody>
</table>

* The Integrated Family Health Program (IFHP) was originally awarded in 2008 as a five-year, USAID-funded project but in October 2012, the program was extended through September 30, 2016 and funding was transitioned to the USAID-supported FP2A project. At this time, the name changed to IFHP+; however, for continuity, the program is referred to as IFHP+ throughout this publication.


† All changes from baseline to endline included in Table 1 are statistically significant (p<.001).
of Health, regional, and woreda authorities, based on the following criteria: 1) health center located in the IFHP+ area, 2) delivery services offered with a permanent provider stationed in the delivery room, 3) health center involvement in IFHP+’s interval IUD scale-up program, and 4) accessibility of the site for frequent follow-up by IFHP+ program staff.

Once sites were selected for the initial pilot, IFHP+ used recommendations from the growing global evidence base to roll out PPIUD services. For example, according to the WHO, counseling for PPFP should optimally begin during ANC. It is also acceptable to counsel during early labor and immediately postpartum, but counseling during active labor is not recommended. Thus, IFHP+ aimed to integrate PPFP counseling into ANC, early labor, and the immediate postpartum period.

Global literature also suggests that PPIUD clinical training is most effective when conducted in a high-volume maternity unit, as providers need the opportunity to insert enough PPIUDs to master skills; thus, demand for the method must be sufficiently high. At the time of the pilot, just one hospital located within the IFHP+ catchment area offered PPIUD services (supported by an NGO); IFHP+ thus organized the practicum component of provider trainings at this hospital.

The timing of PPIUD insertion is another important consideration. Overall, postpartum insertion of the IUD is associated with higher expulsion rates than interval insertion. However, the risk of PPIUD expulsion is lower when the IUD is inserted immediately after the placenta is delivered (postplacental) or intraccesarean than if it is inserted during the early postpartum period (10 minutes to 48 hours after delivery). Thus, when possible, the program aimed to insert PPIUDs during the postplacental period (or if applicable, intraccesarean).

The WHO recommends that PPIUD follow-up (or counseling on PPFP if the woman is not using a method) should be integrated into PNC and infant care. At a minimum, one routine follow-up visit at six weeks post-insertion is recommended. Given this, IFHP+ aimed to integrate PPIUD follow-up into PNC and, as part of its routine program activities, continued to ensure that women not using any form of contraception were counseled on healthy timing and spacing of pregnancies during PNC and infant care.

Finally, knowledge of the IUD lags behind most other forms of contraception in Ethiopia’s method mix and sociocultural barriers such as partner disapproval and pervasive myths and misconceptions about the method persist (e.g., that IUDs can cause infertility and that they migrate to other parts of the body). To overcome these barriers, IFHP+ aimed to dispel myths, increase awareness, and generate demand for the method. Aligning with the global evidence base, these interventions included: addressing provider bias during clinical trainings; facilitating workshops and whole-site orientations with facility staff prior to introducing PPIUDs during the pilot phase; and working with regional and woreda counterparts to incorporate PPIUD awareness creation into health extension worker (HEW)** messaging at the health post level (i.e., the lowest level of primary health care—one level below the health center) and within communities.

**Implementation Experience**

**Sensitization workshops and facility assessments**

As a first step, in March 2013, IFHP+ facilitated whole-site sensitization workshops for 144 clinical health providers, support staff, health office managers, and HEWs associated with the 17 health centers included in the pilot in order to orient all staff to the new service. These workshops covered the range of contraceptive methods suitable for use by breastfeeding women and countered myths and misconceptions about the PPIUD. IFHP+ also conducted facility assessments at each of these 17 health centers to gauge availability of labor and delivery services, skilled staff, and infection prevention materials, supplies and consumables. The program supported facilities to address any gaps that emerged.

**Provider training**

Once the sensitization workshops had been conducted, IFHP+ worked with the government to organize a training of trainers (TOT) on PPIUD insertion for 18 midwives stationed at these 17 health centers in April 2013. Conducted at the central level by master trainers and using a Federal Ministry of Health curriculum, the TOT comprised one week of classroom-based theoretical and simulated model training followed by a week-long clinical practicum. During the practicum, small groups of trainees were assigned to the one hospital in the program catchment area where PPIUDs were routinely provided. Given the unpredictable timing of deliveries, the trainees stayed at the practicum facility overnight during the training period to maximize opportunities to observe PPIUD insertion. Because of the very limited number of women seeking PPIUD removal services, the program used simulated models to train providers on PPIUD removal. IFHP+ staff used a clinical, competency-based checklist as well as a pre-/post-training knowledge test to assess mastery of skills over the course of the training.

The training also addressed provider bias, balanced counseling during ANC, and post-insertion follow-up during PNC. In Ethiopia, midwives working in the maternal health section of health centers generally also provide all MNH services. This includes ANC, labor and delivery, PNC, and infant care; thus, the training covered both clinical skills and PPIUD counseling and follow-up throughout the MNH...
continuum. Before providers returned to their respective health centers, they were given PPIUD kits with consumables and supplies to enable initiation of the service immediately following training.

Following the TOT, these 18 midwives formed regional trainers’ teams and trained three providers from each of the 17 health centers through a series of “rollout trainings.” The regional trainers’ teams held these trainings at high-volume health facilities in the four respective regions.

Increasing community awareness and demand

To increase community awareness and acceptance of the method, IFHP+ worked with the government to train HEWs on PPIUD sensitization and awareness creation during the pilot period. The HEW training also covered strategies for dismantling prevailing myths and misconceptions about the IUD with community members and increasing awareness of the benefits of the method. Following the training, HEWs incorporated PPIUDs into the PPFP counseling and community-based ANC and PNC they were already providing; HEWs also integrated PPIUD information into the household visits they routinely conduct. Further, the HEWs associated with the 17 health centers involved in the pilot participated in the initial sensitization workshop held in March 2013.

Program evaluation

To assess the initiation of PPIUD services and to support facilities to address any challenges, IFHP+ conducted intensive monthly post-training follow-up and supportive supervision visits at each of the 17 health centers using a standard checklist. Performed by IHFP+ staff and government health authorities, these monthly follow-up visits reviewed the following: availability of PPIUD services, commodities, and supplies; infection prevention measures; provider counseling and insertions skills; assessment of the delivery room; review of services logged and data recorded; assessment of the number of clients returning for post-insertion follow-up after six weeks; any supply or equipment shortages reported or observed (with a list of solutions or plan of action in place to remedy the issue); and technical assistance provided during the visit, if any.

In September 2013, at the end of the pilot, IFHP+ worked with the four regional health offices in Oromia, Amhara, Tigray, and SNNPR (including regional, zonal, and woreda health offices) to organize one performance review meeting per region with a range of stakeholders (i.e., trainees, facility heads of the participating health centers, woreda health managers, HEWs, FP experts, and Pathfinder staff). During these meetings, participants reviewed the aggregate results from all the monthly follow-up visits to identify common challenges and potential solutions. Serving as a venue for participatory, learning-oriented analysis, performance review meetings enabled participants to reflect on how challenges had been addressed, to share achievements, and to brainstorm ways in which PPIUD service provision could be improved.

Expansion to additional health centers

Once the pilot was complete, IFHP+ expanded to 32 additional health centers from September 2013 to September 2014. These facilities were selected using the same criteria that were used in the pilot. Again, the regional trainers’ teams (made up of the 18 midwives who were trained in the TOT during the pilot) trained roughly three providers per health center at a central, high-volume location in their respective regions. As in the pilot, before providers returned to their respective health centers, they were given PPIUD kits with consumables and supplies to enable immediate initiation of services.

Due to feasibility considerations, the whole-site sensitization workshops and targeted HEW trainings were not carried through from the pilot to the expansion phase. Further, evaluation of PPIUD services during the expansion phase was absorbed into the routine IFHP+ follow-up strategy, which includes monthly supportive supervision visits and quarterly performance review meetings with health centers, focusing on a wide range of health services.

From July 2013 to September 2014, the 49 health centers involved in the initial rollout of PPIUD services reported 8,374 deliveries. Of these, a total of 1,647 women accepted the PPIUD (19.7 percent).

Results

From July 2013 to September 2014, the 49 health centers involved in the initial rollout of PPIUD services reported 8,374 deliveries. Of these, a total of 1,647 women accepted the PPIUD (19.7 percent). The high acceptance rate in the IFHP+ sample suggests a significant latent demand and unmet need for the PPIUD. It is worth noting, however, that these 49 health centers were selected specifically for their supportive management and active participation in IFHP+’s interval IUD scale-up program. Providers in these health centers were thus already familiar and presumably comfortable with the method, perhaps resulting in increased rates of PPIUD counseling and subsequent higher uptake in these health centers than might be expected elsewhere.
expanding contraceptive options for postpartum women in ethiopia: introducing the postpartum iud  

acceptors (68.5% percent) received the PPIUD during the postplacental period. Just over a quarter (26.9% percent) received the method during the early postpartum period and for 4.5% of the clients, the PPIUD was inserted intraccesarean. IFHP+’s rate of postplacental insertion was higher than many other available programmatic reports (e.g., 30 percent in the DRC, 25 percent in Zambia, 40 percent in India, 37 percent in Guinea, and 27 percent in Rwanda). [26,29]

The fact that 7 in 10 acceptors had the PPIUD inserted within 10 minutes of delivery also indicates that providers were attending women during the most critical moments of labor (i.e., active management of the third stage of labor and monitoring for postpartum hemorrhage during the immediate postpartum period). Thus, the PPIUD interventions may serve to reinforce critical components of care during labor and delivery.

A total of 207 (27 percent) IUD acceptors in the IFHP+ sub-sample returned to the facility for follow-up care at six weeks post-insertion. While lower than anticipated, this rate is similar to reports in the global literature (for example, a recent six-country study reported an overall follow-up rate of 38.1 percent). [30]

Although one follow-up visit at six weeks post-insertion is recommended, this appears to be difficult to achieve since the majority of PPIUD clients experience no complications. [31]

Integrating follow-up into PNC is desirable, but tracking clients between services—especially those provided at the community level—can be challenging.

Overall, among the clients returning to the health centers for follow-up at six weeks post-insertion, reported complications were minimal. No clients sought care for uterine perforation, 10 were treated for infection (1.3 percent), and 25 reported IUD expulsion (3.3 percent). [32] These rates align with the global literature, with studies showing PPIUD expulsion rates of 1–6 percent and infection rates generally staying below 2 percent. [33,34,35]

A total of 17 clients sought IUD removal services; the most common reason for seeking removal was excessive bleeding (11), followed by infection (4), pain (1), and partial expulsion (1).

Lessons learned

Following the IFHP+ interventions, providers at the 49 health centers were able to effectively counsel on and insert PPIUDs with minimal difficulty. Routine post-training follow-up and supportive supervision visits appear to have reinforced providers’ newly acquired skills. Moreover, provision of PPIUD kits and consumables directly following training enabled providers to immediately begin offering the service. Alongside programmatic successes, IFHP+ learned a number of salient lessons.

Mitigating PPIUD service interruptions

The regional trainers’ teams trained three clinicians per health center (of 5–6 total clinicians) in PPIUD service provision. However, upon assessment, it became clear that this was insufficient for ensuring consistency in service delivery, especially since these providers play multiple roles within the maternal health section. Whenever these three providers were not on duty in the delivery room, PPIUD services were interrupted. In response to this challenge, IFHP+ worked with facility heads to organize on-the-job skills training until all qualified staff working in the delivery room were able to provide PPIUD services.

Improving linkages between service delivery points

The majority of PPIUD acceptors (62.4 percent) were counseled during early labor. While early labor is an acceptable time to counsel, ANC is ideal. Thus, given that just over a quarter (28.7 percent) of acceptors reported receiving counseling during ANC, IFHP+ is working with woreda and facility heads to better integrate counseling with...
ANC and other service delivery points along the continuum of care. Specifically, the program is working with its government counterparts to: 1) incorporate PPFP counseling into all new and refresher provider trainings, and 2) bolster PPFP counseling during routine ANC visits made by HEWs.

Representing an issue that spans many programmatic experiences, IFHP+ recognizes the need to strengthen post-insertion follow-up care. In response, the program is designing a feedback system to better equip HEWs to identify clients who received PPIUDs at their respective health centers, follow up with them, and provide reminders of their six-week appointment dates. On the whole, greater involvement of HEWs is an area for improvement that IFHP+ is exploring with its government counterparts.

**Bolstering sustainability and ownership of services**

Given feasibility considerations, when the program expanded to an additional 32 health centers in September 2013, not all components of the intervention process were retained. Namely, the whole-site orientations, targeted HEW trainings, and intensive monthly follow-up visits focused on PPIUD services were not carried through from the pilot to the extension phase. The resulting observed differences in implementation qualities between these two phases, as shown in Figure 1 below, offer important considerations for future scale-up efforts.

When these challenges were first noted at a performance review meeting in February 2014, IFHP+ held a discussion forum with health center and woreda leadership. During this meeting, IFHP+ program staff provided a more thorough orientation to PPFP service provision and, as a result, health center heads have reported higher levels of engagement, evidenced by inclusion of PPIUD services in planning and budgeting cycles and improved supervision and mentorship of providers. IFHP+ continues

### FIGURE 1: KEY COMPONENTS OF THE IFHP+ POSTPARTUM IUD PILOT AND EXPANSION PHASES

*Given feasibility considerations, it was not possible to carry all interventions from the pilot phase through to the expansion phase. In particular, the whole-site sensitization workshops, targeted HEW trainings on the PPIUD, and intensive monthly follow-up visits were not included in the expansion phase. If PPIUD services are brought to scale in the future, implementers should consider which core elements of the intervention should be retained and which can be adapted or dropped.*

**INITIAL PILOT PERIOD (JULY - SEPT 2013)**

**17 Health Centers**

**Observed implementation qualities**
- High levels of engagement
- Strong involvement of HEWs
- High acceptance of PPIUDs

**MAY - JUN 2013**
- PPIUD rollout training for 51 providers

**APR 2013**
- PPIUD TOT for 18 providers
- HEWs affiliated with 17 health centers oriented and trained on PPIUD counseling and awareness creation

**MAR 2013**
- Whole-site PPIUD sensitization workshop held (144 participants from 17 health centers)

**EXPANSION PHASE (SEPT 2013 - SEPT 2014)**

**+ 32 Health Centers**

**Observed implementation qualities**
- Lower levels of engagement
- Reduced involvement of HEWs
- High acceptance of PPIUDs

**SEP 2013**
- PPIUD rollout training for 99 providers from additional 32 health centers
- Routine IFHP+ follow-up (this includes monthly supportive supervision visits and quarterly performance review meetings that focus on a wide range of health services)

**JUL - SEP 2013**
- Monthly follow-up visits to 17 health centers

**SEP 2013**
- One performance review meeting held per region

**2013 • 2014**

While PPIUD acceptance rates remained high across both phases, observed reductions in levels of engagement during the expansion phase raise important questions about the elements of the interventions that should be retained if PPIUD services are brought to scale.
to dialogue with its government counterparts on how to select and prepare sites for introduction and scale-up of PPIUD services.

**Strengthening data collection**

Another challenge that emerged pertains to the collection of PPIUD service delivery data. At some health centers, staff did not understand that PPIUD services were sufficiently different from interval IUD services; thus, all IUDs inserted at the facility were recorded as interval, thereby underestimating the volume of PPIUD services provided. This issue was addressed at the discussion forum in February 2014, and health center heads are working to ensure that all staff members understand the importance of reporting PPIUD services independently from interval IUD services.

**Next Steps**

IFHP+ continues to support additional health centers to introduce PPIUD services through the program’s broader interval IUD scale-up initiative. In order to ensure sustainability and ownership of the services, the program routinely shares lessons learned with its health facility, woreda, and regional counterparts to institutionalize the service and to tailor demand generation activities to the PPIUD user profile.

**ENDNOTES**


**ABOUT THE PROGRAM:** Through the Evidence to Action (E2A) field-support mechanism, USAID funds the Integrated Family Health Program (IFHP+), jointly implemented by Pathfinder International and John Snow, Inc. IFHP+ aims to strengthen integrated contraception, maternal, newborn, and child health (including malaria), and prevention of HIV and AIDS. The program also seeks to improve reproductive health services at the community level, promote gender equality, and support the government’s initiatives to strengthen systems and train health care workers.

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**COVER:** A provider counsels a pregnant woman on the PPIUD in Ethiopia

**PHOTO:** Sala Lewis