Program Learning for Postpartum Intrauterine Contraceptive Device (PPIUCD) Integration with Maternal Health Services

Programmatic Experience from Multiple Countries

Who can benefit from this paper?

- Policymakers
- Program managers
- Maternal and child health workers

What is included?

- Program learning on integration into MH care
- Country experiences from El Salvador, Guinea, India, Kenya, Paraguay, Rwanda, and Zambia

In recent years, the global community experienced a resurgence of interest in postpartum intrauterine contraceptive devices (PPIUCDs). As a result, programmatic experience has continually expanded since 2006. Globally, more women are being encouraged to deliver in facilities, providing increased opportunity for immediate postpartum insertion of an intrauterine contraceptive device (IUCD). Interest has also been renewed in postpartum family planning (PPFP) services in light of recent research that supports the health benefits of pregnancy spacing or limiting for the mother and baby.[1] The PPIUCD sits at the intersection of PPFP and healthy birth spacing or limiting when the Copper T 380A is used for PPIUCD services.

The purpose of this paper is to present country experience from recent Maternal and Child Health Integrated Program (MCHIP), Population Services International (PSI), and Family Health International (FHI)-360 projects that have initiated PPIUCD services through integration of maternity services, and to encourage providers and health administrators to evaluate key programmatic considerations when initiating PPIUCD services. Programmatic experience presented here is based on work in El Salvador, Guinea, India, Kenya, Paraguay, Rwanda, and Zambia, where PPIUCD programming has been successfully introduced. Examples of advocacy, service strengthening, training, capacity-building, community involvement, and monitoring and evaluation are provided throughout.

> "Immediate postpartum insertion of IUCDs appeared safe and effective, though direct comparisons with other insertion times were limited. Expulsion rates appear to be higher than with interval insertion. Advantages of immediate postpartum insertion include high motivation, assurance that the woman is not pregnant, and convenience. The popularity of immediate postpartum IUCD insertion in countries as diverse as China, Mexico, and Egypt support the feasibility of this approach… PPIUCDs are inserted post-expulsion of the placenta up through the initial 48 hours for women who choose this method and without complications of PPH or sepsis." – *Grimes et al. 2010. Cochrane Database Systematic Review, Issue 5: CD003036.*

RATIONALE FOR PPFP/PPIUCD SERVICES

PPFP services are an ideal platform to reposition family planning. The vast majority of women want to avoid another pregnancy for at least two years after delivery.[2] An analysis of Demographic and Health Survey (DHS) data from 52 developing countries revealed that children conceived less than 24 months after the birth of the next oldest sibling had a one to two times (1.1–2.3) higher risk of dying within the first year of life than

children conceived 36 to 47 months apart.[3] The DHS analysis also demonstrated that the likelihood of a child becoming stunted or chronically undernourished increases substantially with decreasing birth intervals. Children conceived after an interval of only 12 to 17 months are 25% more likely to be stunted and underweight than those conceived after an interval of 36 to 47 months.[4] PPIUCDs can reduce the proportion of unintended pregnancies/births and abortions because it is one of the most effective family planning methods.

When can women have PPIUCDs?

- Postplacental: insertion within 10 minutes after placental expulsion
- Intracesarean: insertion before closing the uterine incision
- Pre-discharge: insertion from 10 minutes up to 48 hours postpartum

When can women have interval IUCDs?

- Anytime four weeks or later after childbirth if she is not pregnant

PPIUCDs are the only PPFP method for couples requesting a highly effective and reversible, yet long-acting, family planning method that can be initiated during the immediate postpartum in lactating women. World Health Organization (WHO) medical eligibility criteria state that it is generally safe for postpartum lactating women to use a PPIUCD, with the advantages outweighing the disadvantages. PPIUCDs are cost-effective and can be inserted by a mid-level skilled birth attendant. Policymakers are now accepting evidence that **family planning is a low-cost intervention that reduces maternal, infant, and under-five child mortality**.

Country Experience

MCHIP and others have successfully introduced PPIUCDs to more than 65,000 postpartum women around the world. **India** is scaling up PPIUCD services nationally, with these services already in 19 of 28 states. **Rwanda** now has PPIUCD services in each of its five regions. **Kenya** is targeting one district where midwives are providing PPIUCD services. **Zambia** is using a dedicated provider model. **Guinea** recently documented that when providers gain confidence in PPIUCDs, they also increase the number of interval IUCDs. **Paraguay** reviewed retrospective case series of 8,499 women who received a PPIUCD at the National Hospital in Asunción.

Key themes from these country programs include:

- **Engage experts**: From the earliest stage of program development, engage respected experts in the field, such as professors of obstetrics and midwifery, and their professional organizations (e.g., International Federation of Gynecology and Obstetrics, International Confederation of Midwives, and their national affiliates). Include these experts in stakeholders' meetings.
- **Advocate to policymakers**: Policymakers are looking at mechanisms to reinvigorate family planning, particularly long-acting methods such as the IUCD. In Guinea, India, and Rwanda, Ministries of Health are repositioning IUCDs immediately during the post-obstetrical event, including postpartum and postabortion.
- **Include informed and voluntary choice**: providers need to inform women and receive their voluntary consent before active labor, ideally during antenatal care.
- **Reduce unmet family planning need**: The number of women who have an unmet need for modern contraception in 2012 is 222 million. This number declined slightly between 2008 and 2012 in the developing world overall, but increased in the 69 poorest countries.[5] In 2012, approximately 53% of women (58 million) in sub-Saharan Africa who wanted to avoid a pregnancy were not using family planning or were using a traditional method. These women accounted for 91% of unintended pregnancies.[6] PPIUCDs are one of several family planning methods. Advantages of this method over others include:
    - Fewer instruments and staff are necessary for PPIUCDs than for interval IUCDs.

- PPIUCD insertion only takes a few minutes for women who have been counseled and confirmed their desire for a PPIUCD; these women present no contraindications during labor and delivery for PPIUCD.
- PPIUCDs are more convenient for providers and clients—using the opportunity of childbirth when both the mother and provider are at the facility, another FP visit is not necessary.
- PPIUCDs meet the reproductive needs of women who want to space future pregnancies as well as those who have completed their family size and wish to limit future pregnancies.

Service Strengthening

The PPIUCD is not a stand-alone service; rather, it is integrated with maternal health services during antenatal care (ANC) visits for counseling and method choice, and with birthing and postpartum services for provision of the method. Often, services at facilities need to be strengthened, especially to ensure that all women are effectively counseled and have time to make an informed and voluntary choice of contraceptive method. Sound infection prevention practices frequently need to be assessed and strengthened, as well. Continual availability of trained providers, supplies, and equipment must also be in place. Use of job aids and information, education, and communication (IEC) materials can be helpful for promoting quality and acceptability of services. The mother's contraceptive choice must always be communicated effectively among antenatal, maternity, and postpartum staff.

> In the Rwanda program, PPFP counseling is systematically integrated during ANC, L&D, and pre-discharge. Maternity staff is trained, and newly trained providers receive timely supportive supervision. The rate of PPIUCD acceptance is greater at sites where all these areas have been strengthened.
> *– FHI 360-led evaluation with MCHIP's technical leadership and Jhpiego's program implementation*

When strengthening PPFP service provision, consider updating maternity, antenatal, and postpartum staff on all methods of contraception and provision of PPIUCDs. Ongoing monitoring of these services ensures quality. Service strengthening lessons learned from successful PPFP/PPIUCD country programs include:

- Ensure informed and voluntary choice through counseling and decision-making during ANC and/or pre-discharge counseling and services.
- Make sure that supplies, equipment, and items required for services are available at the place of IUCD insertion (e.g., labor room, delivery suite, operating theater, postpartum procedure room).
- Ensure quality of services by following performance standards/checklists that include PPFP counseling, client assessment, infection prevention practices, correct insertion techniques, and patient follow-up visits.
- Ensure high fundal placement by having providers straighten out the lower uterine angle by applying upward pressure on the uterus.
- Strengthen the follow-up system by establishing recordkeeping for PPIUCD insertions at the place and time of follow-up visits.
- Consider contacting postpartum women by cell phone and examining only those who indicate a problem.

Postabortion Care

Include gynecology personnel who treat postabortion care (PAC) clients in the emergency room. Several studies suggest that PAC clients seek an effective method, such as an IUCD, during care.[7] However, if the client leaves without the method, she is less likely to return for an interval insertion and less likely to be using an IUCD six months post-obstetrical event.[8,9]

PREPARING THE TRAINING SITE

Country programs have documented a number of lessons learned on preparing and conducting effective training and capacity-building, including:

- Develop a core national training/capacity-building team (well-respected teaching hospital faculty are a good choice).
- Select a hospital with a busy maternity unit to initiate PPFP/PPIUCD services. High delivery numbers should ensure that enough women accept a PPIUCD. During training/capacity-building of midwives in Zambia, each midwife developed competency and confidence after inserting PPIUCDs in nine clients.[10]
- Train staff who actually care for the majority of the deliveries at the site as they will be acting as preceptors in future trainings.
- Assess the staff who will be preceptors to see that they have achieved competency on PPIUCD services and are following the standardized guidelines.
- Provide information about PPIUCD services to ANC clients to generate demand before conducting training/capacity-building. Document in the ANC card that the client has been counseled and indicate her PPFP method choice.

TRAINING AND CAPACITY-BUILDING

- Demonstrate all the components of PPIUCD services during competency-based training/capacity-building, including counseling, organization of services, IUCD insertion, infection prevention, documentation, and follow-up.
- Use humanistic models so that participants can develop competency prior to clinical practicum.
- Preceptors should provide feedback to participants about the clinical practicum in a private area without clients. Preceptors should start with positive observations and then areas to improve.
- Orient all physicians, residents, midwives, and nurses at the facility.
- Orient support staff such as ward cleaners.
- Conduct post-training/capacity-building supportive supervision within four to six weeks after the training.

Health providers at outlying health centers, where the postpartum mothers may return for their postnatal visit, should also be oriented to PPIUCDs. For example, in El Salvador, mothers may choose to go to a district hospital for ANC and delivery. However, when they are safely past the pregnancy and childbirth, they may return to their local primary health center. In one project site, where health workers at the outlying health centers were not oriented on PPIUCDs, mothers were going to smaller sites for follow-up visits. Staff from PSI cited one consequence of no orientation, "When health workers at small health posts provided the six-week visit to postpartum women and discovered the IUCD string in situ, they pulled out the IUCD."[11]

2011 PPIUCD Regional Workshop, Rajasthan, India

Integrated Approach

The approach for PPIUCD service provision in several programs is based on an integrated model for ANC, intrapartum care (labor and delivery [L&D]), and postpartum care. During ANC, women are asked about their reproductive goals and encouraged to wait at least 24 months after delivery before attempting another pregnancy if they plan to have additional children. Women also receive counseling on different PPFP methods during their ANC, including the lactational amenorrhea method (LAM), DMPA injections, condoms, implants, IUCDs, and permanent methods. To facilitate improved communication between ANC and L&D, **several country programs have effectively used a PPFP rubber stamp to indicate the completion of PPFP counseling and the client's desired family planning method**. Women who do not receive ANC are screened on arrival to the labor unit. Those who express interest in PPIUCDs are screened for clinical conditions based on WHO medical eligibility criteria. PPFP counseling is provided in early labor, if appropriate, and again in the postpartum ward. If the pregnant woman selected the PPIUCD, her choice is re-confirmed before childbirth. Her medical history is reviewed for conditions that are contraindicated for a PPIUCD, as well.

Paraguay developed this integrated approach in 2000, which has since been used as the model in several countries where MCHIP is supporting PPIUCD programs. At the National Hospital in Asunción, Paraguay, expectant mothers are counseled during ANC on PPFP. If these women are in the early stages of labor and can make an informed contraceptive choice, they are counseled and offered PPFP, including the PPIUCD. If it appears that active labor or other conditions would preclude an informed choice, the counseling is deferred until the first day postpartum.

Protocols and Standards

Standardizing the provision of PPFP care with national guidelines is helpful to ensure that all women receive high-quality PPFP services. In India, the inclusion of PPFP in the national guidelines supported scale-up efforts, as all institutions have the same process to follow. Standards and guidelines are the foundation for quality of care. They provide the template for training/capacity-building of providers and for supervisors to assist staff to achieve high-quality services. Establishing a facility-based quality assurance program assesses performance at the facility, identifies gaps, and implements interventions to achieve desired performance.

Supportive Supervision

Training as a one-time intervention is never sufficient. Trainers and supervisors must support the recently trained providers to assist them in implementing PPFP/PPIUCD services and ensure the quality of services through ongoing monitoring and technical support. In MCHIP Guinea, immediately following training, the trainers assisted the providers to establish a PPIUCD service in their facility, oriented all staff, and evaluated flow of clients and availability of instruments and IUCDs in the labor and delivery areas. In Rwanda and India, supportive supervision within six weeks of training and continuous monitoring increased the acceptance of PPIUCDs. Supportive supervision in Rwanda provided the opportunity for supervisors and providers to address challenges and barriers to effective service provision, such as myths about IUCDs, transfer of trained personnel, and minimal counseling conducted during ANC. Supervisors can also help support providers' skills to improve counseling and infection prevention practices and manage complications such as expulsion of the PPIUCD or client dissatisfaction. In addition, supervisors shared with providers experiences from other sites that may help them meet some of their challenges.

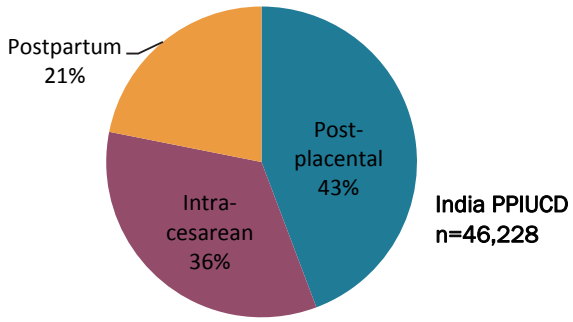
Monitoring and Evaluation

Indicators for monitoring and evaluating PPIUCD programs may include:

- Number of antenatal clients/women in early labor and postpartum women counseled on PPFP
- Percentage of women delivered at the facility who received PPIUCD
- Percentage of PPIUCD insertions that are postplacental, intracesarean, and immediate or pre-discharge postpartum
- Percentage of PPIUCD users who return for a follow-up visit within six weeks postpartum
- Percentage of PPIUCD users who reported complications such as spontaneous expulsion, infection, pregnancy, or request for removal within first six months due to side effects of PPIUCD
- Percentage of facilities that provide PPIUCD services
- Percentage of facilities that have PPIUCD services and have achieved 80% of the national PPIUCD quality performance standards

In the India program, 34% of those who received a PPIUCD returned for a follow-up visit. Most of these women were seen in person (76%). The remaining 24% were reached by phone to inquire about PPIUCD status. Approximately 6% of women who had a vaginal childbirth in the sites monitored chose a PPIUCD (n=376,219), and 8% of those who had cesarean section (n=164,550). **Figure 1** identifies the percentage of three different types of PPIUCD insertion in India in 19 states that are supported by several donors: postplacental (43%), intracesarean (36%), and immediate or pre-discharge postpartum (21%).

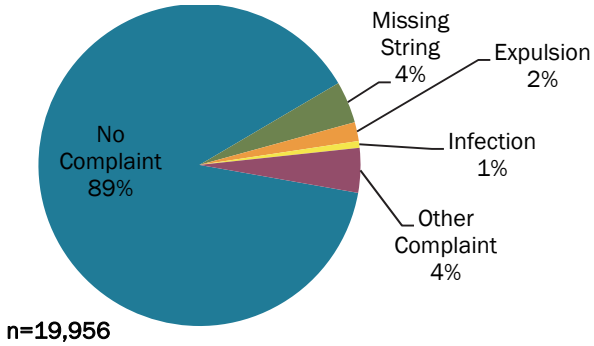
Figure 1. Percentage of PPIUCD types inserted, India



According to data from country programs, the vast majority of PPIUCD users do not have complications. For example, complications among PPIUCD users in Paraguay are reported at 4.9%, with a very low spontaneous expulsion rate of 1.4%. As seen in **Figure 2**, 89% of PPIUCD users in India had no complaints; 4% reported missing strings; 2% expulsion; 1% infection; and 4% "other complaints" (e.g., bleeding, cramping). In Guinea, 96% returned for follow-up, and the spontaneous expulsion rate was 2.3% (n=1,160).

The impact of PPIUCD use on other methods is interesting. Notably in one site in Rajasthan, India, an increase in interval IUCDs was observed as the PPIUCD acceptance rate increased. In one facility in Jaipur, India (HB Kanwatiya), after the PPFP/PPIUCD program was initiated, the percentage of the method mix changed from 66% short-acting methods in 2010 to 50% short-acting in 2011 (meaning that the other 50% were long-acting or permanent methods).

Figure 2. PPIUCD follow-up visit results at six weeks, India



RAISING AWARENESS AND PROVIDING INFORMATION

Behavior change communication, social marketing, and community mobilization (both at the facility and community levels) can help generate demand for and increase acceptability of PPIUCD services. Best practices and lessons learned are described below.

Facility Level

PPFP/PPIUCD counseling can occur during ANC, early labor, postpartum pre-discharge, and group talks. IEC posters, folders, and job aids are helpful. Mothers' choice of PPFP should always be communicated among health workers from ANC and L&D by systematically noting PPFP counseling and method chosen on the client card. Lessons learned include:

- **India**: All levels of health workers within the facilities need to be oriented on PPFP/PPIUCD terminology appropriate for the level of staff and the benefits for postpartum women leaving the facility with an effective reversible method.
- **El Salvador, Kenya**: Orient the staff who work at health centers and care for antenatal and postnatal clients inclusive of outlying clinics.
- **Paraguay**: Orient gynecological staff who work in the emergency room.
- **India, Kenya, Rwanda, and Zambia**: Look to champions and health workers who have consistently provided high-quality PPFP, inclusive of offering PPIUCDs, and are enthusiastic about PPIUCD services.

Community Level

Community health workers (CHWs) have increased the demand for long-acting methods through counseling and referrals in Ethiopia.[12] In the Healthy Fertility Study in Sylhet, Bangladesh, there was an increase in family planning use at 18 months postpartum in the intervention area that used CHWs to counsel on PPFP, as compared with the control area. The increase in family planning was 47%, as compared with 34% ($p<0.001$).[13] Lessoned learned at the community level include:

- **Mobilize community workers** to counsel on PPFP including PPIUCD. Orientation on PPIUCDs will help CHWs generate demand for PPFP and PPIUCDs by sharing appropriate information with the community, dispelling myths and misconceptions, and making referrals/linking women to the health facility for services.
- **Involve decision-makers**, both in the community and the home, to increase understanding and uptake of PPFP/PPIUCD.
- **Engage satisfied users as champions** or peer educators who can speak honestly about their PPIUCD.

Key messages for providers and community workers include:

- For the health of the mother and baby, wait at least two years after a birth before attempting another pregnancy.
- Fertility can return before the menses resumes.
- PPIUCDs are an effective reversible family planning method that has no impact on breastfeeding and can be inserted while at the hospital/maternity unit prior to discharge.
- Side effects can include an increase in menstruation, spotting, and cramps in the lower abdomen. These side effects usually go away over time. Rarely, the PPIUCD expels on its own.
- The mother should return to the health facility in six weeks post-delivery or at any time if she has a question or problem.

SUMMARY

PPIUCD provision and uptake are feasible for both providers and clients. PPFP that includes PPIUCDs has been used in several countries to reinvigorate family planning, especially in light of the health benefits to infants and mothers when the couple avoids a closely spaced or unintended pregnancy. Global efforts are encouraging women to go to health facilities for childbirth. This effort doubles as an opportunity for PPFP, as the PPIUCD can be used for spacing or limiting future pregnancies. Recent programmatic experience demonstrated a lower expulsion rate of 2% to 6%, as compared with the 10% to 15% previously reported in the literature.[14,15] Effective implementation involves service strengthening that includes champions of PPIUCDs and training of providers who counsel women and those who attend deliveries. Training/capacity-building is best done at a busy maternity unit that practices infection prevention and counseling, and where demand has been generated. All staff must be oriented on PPFP and PPIUCDs. Trainers should implement supportive supervision to providers shortly after training and schedule frequent monitoring of services. Generate demand by orienting community health workers to PPFP/PPIUCDs, so they share appropriate information with the community, dispel myths and misconceptions, and provide referrals/linkage for women to the health facility. Health workers must provide informed and voluntary choice, at all levels of counseling and decision-making, whether by CHWs, during ANC counseling, and especially during counseling or reaffirming an ANC choice when the woman is in labor, as well as pre-discharge. Involving decision-makers, both in the community and the home, has been an effective strategy to increase understanding and uptake of PPFP/PPIUCDs in many country programs.

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