

THE MARYLAND IMMEDIATE POSTPARTUM LONG ACTING REVERSIBLE CONTRACEPTION (IPP LARC) TOOLKIT



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The toolkit contains information that may expand or change over time. The content has been curated and organized by Anne Burke, MD and other OB/Gyn physicians at Johns Hopkins Bayview Medical Center in Baltimore, MD in cooperation with the Maternal Child Health Bureau of the Maryland Department of Health

Please visit the website to access the toolkit:

https://phpa.health.maryland.gov/mch/Pages/fp_larc.aspx

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Section 1: Introduction

This toolkit provides guidance for provision of **immediate postpartum long-acting reversible contraception (IPP LARC)** in Maryland hospitals. This document and associated materials address considerations for integration of IPP LARC into existing workflows and protocols. The toolkit aims to provide hospitals with technical assistance as they integrate IPP LARC into routine practice.

Clinical practice guidelines from the [CDC](#) (33) and the [American College of Obstetricians and Gynecologists](#) (ACOG) (4) support IPP LARC insertion. Although the use of IUDs and implants immediately postpartum is off-label, insertions are considered safe; further information can be found in ACOG's Practice Bulletin 186 (4). Information for this toolkit was also gathered from the [Association of State and Territorial Health \(ASTHO\)](#) Immediate Postpartum LARC Learning Community, as well as LARC toolkits from other states and the University of California San Francisco's (UCSF) [Intrauterine Devices and Implants: A Guide to Reimbursement](#) (1).

In 2016, stakeholders (pharmacy, billing, and clinicians) at five Maryland hospitals participated in informational interviews ([Appendix 7](#)), which also informed this guide.

This toolkit begins with [information on LARC methods](#) and the [IPP LARC context](#). It then presents a recommended approach to [initiating an IPP LARC program](#). We then discuss [selected patient care issues](#) (counseling, selection/eligibility, insertion, and removal), [pharmacy considerations](#), [resources pertinent to reimbursement](#), and discussion of [challenges and barriers](#).

Section 2: Long-Acting Reversible Contraceptives (LARC): The Basics

2.1. LARC Methods - IUDs and Implants

Long Acting Reversible Contraceptive (LARC) methods include *intrauterine devices (IUDs)* (copper and hormonal) and the *subdermal implant* ([Table 1](#)). LARC methods are highly effective (>99%) in preventing pregnancy, can remain in place for several years, and allow rapid return to fertility once discontinued (2). When barriers such as access and cost are removed, many women may prefer LARC over short acting methods (3). ACOG supports [IPP LARC as a best practice](#) (4).

[Note that some of the linked resources in this document require organizational membership to access. Publically available resources are used as often as possible.]

Table 1. Types of LARC Devices Available in the United States

Device Type	Product/ active ingredient	Women with Unintended Pregnancy in 1st Year of Use (%)	FDA-approved duration of use (years)*	Brand name [Manufacturer]
Intrauterine device (IUD)				
Copper	Copper T380A	0.8	10	Paragard® [CooperSurgical]
Levonorgestrel (LNG)	LNG-20 (52mg total/ 20mcg/day)	0.2	7	Mirena® [Bayer]
	LNG-18.6 (52mg total/18.6mcg/day)	0.2	7	Liletta® [Medicines 360]
	LNG-19.5 (19.5mg total/ 17.5mcg/day)	0.2	5	Kyleena® [Bayer]
	LNG-13.5 (13.5mg total/14mcg/day)	0.2	3	Skyla® [Bayer]
Implant				
Etonogestrel	Etonogestrel (68mg, controlled release)	0.05	3	Nexplanon® [Merck]

* Evidence supports longer periods of effectiveness for several of these devices, although FDA-approved labeling does not reflect this. [Adapted from ACOG Practice Bulletin 186 (4)]

2.2. IPP vs. Interval LARC

A woman can initiate contraception at any time as long as it is reasonably certain that she is not pregnant (5). Placement techniques for the implant are the same, regardless of timing, but IUD placement techniques differ. There are different definitions related to postpartum timing of LARC insertion. For purposes of this document, we utilize the following timing definitions:

- **Interval placement:** Insertion not related to timing of childbirth.
- **Immediate postpartum placement:** Within 48 hours of delivery (6, 7).

- **Postplacental IUD placement:** Insertion within 10 minutes following the delivery of the placenta in a vaginal birth (6, 7). *ACOG recommends this timeframe as a best practice for PP IUD insertion (8).*
- **Cesarean IUD placement:** Insertion through the uterine incision immediately following the removal of the placenta during a cesarean section.
- **Delayed postpartum placement:** Insertion by 4-6 weeks postpartum.

2.3. Why implement IPP LARC Services?

Ample evidence supports the safety of IPP LARC, for both IUDs and implants (54). Successful initiation of IPP LARC in several Maryland hospitals provides reassurance that IPP LARC is feasible. There are several additional factors to consider.

- **LARC methods are highly effective.** Fewer than 1 in 100 women using an IUD or contraceptive implant will get pregnant within one year (2).
- **Nearly half of pregnancies in the US and Maryland, and 80% of teen pregnancies, are unintended (10).** [The Contraceptive CHOICE Project](#) demonstrated that use of LARC reduces unintended pregnancy, teen pregnancy, and abortion (11). This project offered contraception at no cost to more than 9,200 women (12, 13). Key findings from the CHOICE Project are presented in Box 1.

Box 1: Key Findings from Contraceptive CHOICE Project: (11)

- After standardized contraceptive counseling, 75% of women chose a LARC method.
- 86% of women who chose a LARC method were still using that method one year later, compared to 55% of women who chose a non-LARC method.
- Rates of unintended pregnancy were 20 times higher among women using a non-LARC method, compared to those using a LARC method.
- The abortion rate among CHOICE participants was less than half the national and regional rates.
- The teen birth rate among CHOICE participants was 6.3 births per 1,000, compared to the national rate of 34.3 births per 1,000.

- **Rapid repeat pregnancies**, occurring less than 18 months after a prior delivery, may be associated with poor maternal and neonatal outcomes (14) (15). One-third of pregnancies in the United States are conceived within 18 months of a previous birth (16); over half of these are unintended (17).

- **LARC methods are cost-effective.** Despite higher upfront costs, LARC methods deliver substantial cost savings related to prevention of unintended pregnancy (7). *Cost considerations should not prevent a provider from removing a LARC device upon patient request.* LARC counseling should include information about removal.
- **IPP LARC access increases availability to women when they need contraception.** The immediate postpartum period is an opportune time for contraceptive provision.
 - **The inpatient setting** eliminates some potential access barriers, such as loss of insurance coverage postpartum.
 - **Not everyone waits to have sex.** About 50% of women initiate sexual intercourse before the six week postpartum visit (4, 18). *Ovulation can occur as soon as 25 days postpartum* (19), putting women at risk of pregnancy.
 - **Up to 40% of women do not attend a postpartum visit.** Some of these women will next present for care with an unplanned pregnancy (20).
- **IPP LARC can make a difference in Maryland.** Through implementation of IPP LARC programs, Maryland hospitals have opportunity to reduce unintended pregnancy.
 - [Maryland's Preterm Birth Rate](#) in 2017 was 10.5%, higher than the U.S. rate of 9.9% [7]. The March of Dimes 2020 goal is to reduce preterm births to 8.1% of all births (21).
 - The infant mortality rate in Maryland was 6.5 per 1,000 live births (2017) compared to the U.S. average of 5.8 (22, 23).
 - The percentage of Maryland repeat teen births (ages 15-19) was 15% in 2016 (24).

Section 3: Implementation of IPP LARC in the Hospital Setting: Who, What, How

Introducing IPP LARC into a hospital can seem daunting. Success depends on cooperation among providers and departments within the hospital. Experiences of several hospitals in the state and country show that IPP LARC can succeed in many types of hospital settings.

3.1. Who: Participants in IPP LARC Implementation

Successful IPP LARC programs involve representatives from multiple departments, particularly in the initial stages. Key participants can include representatives from the following groups or departments, who will take the lead on relevant tasks for IPP LARC rollout.

- Physicians and midwives
- Nurses
- Ancillary medical staff
- Pharmacists and pharmacy staff
- Billing/coding staff
- Medical records staff
- Information technology (IT)
- Administration
- Finance

Others not listed here may also be valuable contributors. Not all representatives need to participate in all aspects of training or planning, but appropriate involvement of each can facilitate a smooth rollout.

3.2. What: Key factors for IPP LARC Implementation

IPP LARC implementation should consider several factors. Examples of these include:

- **Types of LARC devices.** Hospital formularies should include a range of LARC options. ([See Table 1, page 6](#)), including hormonal and copper IUDs and implants.
- **Patient-centered contraceptive counseling.** Counseling about method choice should be patient-centered. Women who choose a LARC method can participate in the decision about timing of placement. Those who first present for care at time of delivery can also be counseled at the time of admission.
- **LARC placement training.** Even highly experienced LARC providers may need training in PP IUD placement techniques.
- **Training of other staff.** Nurses are important sources of contraceptive information for patients. Similarly, lactation consultants can counsel breastfeeding mothers about safety of LARC methods during lactation.
- **Best practices for billing and coding.** Clinical staff, pharmacists, financial administrators, billers, and coders should participate in program planning when possible.
- **Documentation.** Clinical documentation, including via electronic medical record (EMR), is important for patient care and accurate coding.

3.3. How: Postpartum Contraception Access Initiative: A Framework for IPP LARC Implementation

The [ACOG Postpartum Contraception Access Initiative](#) (PCAI) (25) is an online resource that provides support for hospitals implementing IPP LARC programs. Key stages or tiers include **Exploration**, **Installation**, and **Implementation/Sustainability**, with roles for a variety of participants. IPP LARC implementation can be approached as a tiered/staged timeline, and as a task-based process. Our adaptation of key points of the PCAI are found in Table 2 (25).

Table 2: Guidance from PCAI for Hospital Implementation of LARC Services

Team Member	IPP LARC Stage: Roles/Steps for Team Members		
	Exploration*	Installation	Implementation™
Clinician	<ul style="list-style-type: none"> ● Identify champions ● Provide clinical evidence ● Engage administration 	<ul style="list-style-type: none"> ● Develop policies, protocols, guidelines ● Work with pharmacy on P&T committee application ● Draft consent forms ● Insertion training ● Train/educate nurses, staff, pharmacy ● Educate patients 	<ul style="list-style-type: none"> ● Finalize supplies list ● Consider creating kits ● Determine preferred locations for and timing of placement ● Plan refresher trainings ● Include IPP LARC in new-hire training
Pharmacy	<ul style="list-style-type: none"> ● Identify champions ● Verify insurance participation/reimbursement rates ● Engage administration 	<ul style="list-style-type: none"> ● Work with clinicians on P&T committee application ● Get devices on formulary ● Plan vendor contracts, inventory system, distribution plan ● Purchase devices 	<ul style="list-style-type: none"> ● Determine storage locations ● Monitor to optimize service flow
Finance/ Billing	<ul style="list-style-type: none"> ● Identify champions ● Verify insurance participation/reimbursement rates ● Verify payment 	<ul style="list-style-type: none"> ● Clarify payment submission plan ● Utilize appropriate codes ● Adapt documentation as needed 	<ul style="list-style-type: none"> ● Submit claims ● Communicate with payors as needed
IT/EHR	<ul style="list-style-type: none"> ● Initiate planning to incorporate changes in documentation, other systems 	<ul style="list-style-type: none"> ● Incorporate documentation and processes for: <ul style="list-style-type: none"> ● Clinical documentation ● Ordering ● Charting ● MAR ● Charges/billing ● Inventory ● Device logs 	<ul style="list-style-type: none"> ● Work with other team members to improve documentation and processes as needed

*In the Exploratory stage, all groups should have representation on an IPP LARC team. This team will plan for implementation, and establish a system for ongoing communication and meetings. ™The Implementation stage should begin with a pilot or trial period. This time will allow processes to be fine-tuned and concerns addressed.

Stage 1: Exploration

Exploration is the first stage for programs that have a strong interest in implementing IPP LARC.

Key steps are to:

- **Identify champions.** Most programs need clinician, pharmacy, nursing, and financial champions. Midwives, lactation consultants, billing/coding, and information systems representatives should also be included, when possible.
- **Share clinical evidence.** The ACOG [Immediate Postpartum LARC Resource Digest](#) (26) and this toolkit summarize some useful resources.
- **Verify insurance participation, reimbursement levels, and payment.** Maryland Medicaid reimburses for IPP LARC procedures, devices, and supplies, as do many other insurance providers in the state. See the [Maryland Family Planning Fact Sheets](#) (27).
- **Engage hospital administration.** Programs with support of hospital administration are more likely to sustain over time.
- **Establish an IPP LARC team.** Those who take active roles may want to form a formal team.

Stage 2: Installation

The Installation phase focuses on activities to prepare for implementation. Steps need not progress in a set order, and not all steps may be necessary for all programs. (25)

- **Clinicians: Prepare policies and protocols.** Policies, protocols, supply lists, consent forms, and patient education materials often need to be hospital-specific.
- **Clinicians: Conduct training and education for clinicians and staff.** All delivering physicians should learn to perform insertions. Hospitals with residency programs can incorporate IPP LARC training into the curriculum. Other obstetrical providers, such as midwives, should participate in training if they plan to offer IPP LARC. Physicians and other providers should understand IPP LARC procedures and services. Training on contraceptive counseling may also be advisable.
- **Pharmacy tasks.** Pharmacy tasks for IPP LARC may include: Pharmacy and Therapeutics Committee approval, adding LARC devices to formulary, and stocking.
- **Finance and Billing tasks.** These departments can verify payment submission and other related processes with payers, and work with IT personnel to update the electronic health record (EHR). Proper documentation for IPP LARC can help prevent claim rejection.
- **Information Technology and EHR tasks.** Relevant tasks include preparing the hospital system for clinical documentation, coding/charge capture, device logging, and inventory monitoring.

Stage 3: Implementation/ Sustainability

Implementation, and sustaining established programs, require both initial and ongoing attention. The effort needed for some of the required tasks may be more intensive at the time of initial implementation, while for others, ongoing effort may be more important.

- **Clinicians:**
 - **Clinical leadership** should meet with staff at intervals, to review how procedures are working and identify any needed changes.
 - **Ensure that equipment and supplies are available.** Collaboration among hospital staff, pharmacy staff, and other personnel will facilitate this.
 - **Education.** This includes insertion training, refresher trainings, and training new staff.
- **Device storage, placement, and timing.** The PCAI recommends assessing device flow after implementation, for both IUDs and implants (25).
- **Claim submission and communication with payers.** Billing staff should review payments received against claims data to identify denials. Meetings with Medicaid or insurance organization representatives may help to resolve any issues.

Section 4: Patient-Centered Contraceptive Counseling

4.1. Providers' Roles

Physicians and other clinicians who provide obstetrical care and plan to offer IPP LARC procedures, have an important role in counseling. L&D and postpartum nurses spend time with patients, serve as patient advocates, and explain medications. Lactation consultants educate patients about breastfeeding.

Patient-centered contraceptive counseling provides information for individuals to select the method that best meets their preferences and needs. The quality and content of counseling affects method satisfaction. For women who receive little or no prenatal care, presentation in labor may be their first opportunity to discuss contraception. While it is preferable to avoid this timing as the first time to discuss LARC methods, it can be an important point of access for some.

Education for all physicians and other providers regarding counseling, consent, and IPP LARC insertion helps avoid coercion and improves support for contraceptive services. Considerations include timing and location for counseling/consent, and the procedure, roles, and responsibilities for each caregiver.

4.2. Contraceptive Choice

Clinicians often emphasize efficacy above all else when discussing contraceptive options, but many factors influence an individual's contraceptive choice. These may include prior personal experience with contraceptive use, cultural views on contraception, experiences of family and friends, partner preferences, concern for side effects, and concerns about safety.

Providers should also be aware that reproductive coercion has historically been experienced by many communities, including women of color and low-income women (39). Whether consciously or not, physicians and other providers may counsel patients differently based on race or socioeconomic status. Women of color are more likely to experience race-based discrimination when obtaining family planning services (28, 29, 30). Given the historical context of coercive practices related to contraception, hospitals should consider offering their providers additional training on provider and systemic bias, as well as patient-centered counseling.

4.3. Shared Decision-Making

A shared decision-making approach to contraceptive counseling is a collaboration between a patient and her physician, or other provider, where healthcare decisions are made together. Such an approach supports individual decision-making and reproductive autonomy, as well as utilize provider knowledge. Some useful resources are [recommended by ACOG](#) as part of the **Contraceptive Counseling Resource Digest** (31). Key points of the shared decision-making model are presented in Box 2.

Box 2: Key Points of the Shared Decision-Making Model of Contraceptive Counseling

- Take an interest in the individual; establish rapport.
- Focus on the individual's preferences. Ask what is important in choosing a contraceptive method. [Probe for preferences such as effectiveness, side effects, method use, return to fertility]
- Describe effectiveness and side effects in easy-to-understand language.
- Respectfully ask for permission to provide information on other methods.
- Provide information comparing and contrasting different methods.
- Tailor information to individual preferences and their relative importance.
- Validate experiences or beliefs on birth control methods; provide information to address misconceptions.
- Discuss logistics of getting the selected method of birth control.
- Allow time for questions.
- Discuss a follow-up plan if a woman are not satisfied with their choice.
- For women selecting a LARC method, include information about logistics of obtaining removal.

Resource: ACOG Webinar, [Contraceptive Counseling, and LARC Uptake](#) (32). (Webinar is free for ACOG members who sign up.)

4.4. Counseling and Informed Consent

The informed consent process is part of counseling. Hospitals have their own requirements for documenting the informed consent process, and their own consent templates. Key components of informed consent for IPP LARC include efficacy, expectations of the procedure, non-contraceptive benefits, risks of insertion/removal, and anticipated side effects. Informed consent should involve a clinician who provides IPP LARC.

Section 5: Patient Criteria for IPP LARC: Who is Eligible?

5.1. Medical Eligibility for IPP LARC

There are few contraindications to use of IPP LARC. Contraindications to the use of LARC are summarized in the following tables, adapted from the US Medical Eligibility for Contraceptive Use (US MEC) (33). The US MEC assigns safety criteria for use of contraceptive methods in the setting of a range of medical conditions. Generally, a method that is Category 1 or 2 for a given condition is considered safe to use. Table 3 defines US MEC Categories, while Table 4 lists Category 3 and 4 conditions (relative and absolute contraindications) for LARC. Most women are candidates for LARC use.

Table 3: U.S. Medical Eligibility Criteria (MEC) Categories for Contraceptive Use

1	A condition for which there is no restriction for the use of the contraceptive method
2	A condition for which the advantages of using the method generally outweigh the theoretical or proven risks (method is generally safe to use.)
3	A condition for which the theoretical or proven risks usually outweigh the advantages of using the method (can be considered a relative contraindication, but may be the best option in some cases)
4	A condition that represents an unacceptable health risk if the contraceptive method is used (can be considered an absolute contraindication)

Data from [U.S Medical Eligibility Criteria for Contraceptive Use](#), 2016. Centers for Disease Control and Prevention (33).

Table 4: MEC Category 3 and 4 Conditions for Initiation of LARC Methods

Method	MEC Category 3	MEC Category 4
Intrauterine Device (IUD) (Any type)	Complicated transplant graft failure	Postpartum sepsis Current Cervicitis/Chlamydia/ Gonorrhea Current PID Immediate post-septic abortion Unexplained vaginal bleeding Malignant gestational trophoblastic disease Cervical cancer Endometrial cancer Uterine anomaly/anatomical distortion Pelvic Tuberculosis
Additional concerns for LNG only	Lupus with antiphospholipid antibodies Past breast cancer (>5 years) Severe decompensated cirrhosis Hepatocellular adenoma/ hepatoma	Current breast cancer (within 5 years)
Additional concerns for Copper only	Severe thrombocytopenia	
Contraceptive Implant	Lupus with antiphospholipid antibodies Past breast cancer Severe decompensated cirrhosis Hepatocellular adenoma/ hepatoma	Current breast cancer

Source: US Medical Eligibility for Contraceptive Use, 2016 (33)

5.2. Breastfeeding Considerations

The U.S. Medical Eligibility Criteria for Contraceptive Use (US MEC) supports the use of IPP LARC. All LARC methods are considered Category 1 or 2 for breastfeeding women (33) and LARC use does not appear to harm breastfeeding duration, milk composition, or infant growth (34). The copper IUD contains no hormones, and the hormones in the levonorgestrel IUD have a primarily local effect and do not affect breastfeeding. The implant is a systemic, progestin-only method. Its use is not associated with adverse outcomes related to breastfeeding.

One resource, *Drugs in Pregnancy and Lactation*, is reassuring about the use of levonorgestrel and etonogestrel while breastfeeding (35). ACOG acknowledges that data are limited, and theoretical concerns may exist. Obstetric care providers should discuss limitations and concerns individualized to each woman (36).

5.3. Additional Considerations for IPP LARC Placement

Conditions may arise during labor or delivery that raise concern about whether it is appropriate to proceed with planned IPP LARC insertion. Some are listed here. Other complications may occur; providers should use clinical judgment as to whether to proceed. Some of these recommendations are based on clinical experience, as well as existing evidence on LARC methods.

- **Intrauterine infection.** An IUD should not be inserted in the setting of postpartum sepsis, intrauterine infection (chorioamnionitis/endometritis), or prolonged (>18-24 hours) rupture of membranes (8, 33).
- **Positive Chlamydia or Gonorrhea screen** on admission contraindicates IPP IUD placement. Chlamydia or Gonorrhea diagnosed and treated earlier in pregnancy need not preclude IUD insertion at time of delivery.
- **Postpartum hemorrhage (PPH).** Management of PPH should be prioritized over IUD insertion. A self-limited bleeding episode that is rapidly corrected may allow placement of an IUD. IUD placement should potentially be deferred in the setting of ongoing abnormal bleeding. Continued bleeding from PPH may increase the risk of expulsion of an IPP IUD.
- **Hemodynamic instability.** If the patient is hemodynamically unstable, it is prudent to defer elective procedures, including IPP LARC placement, until the patient is no longer critically ill.
- **Neither intraamniotic infection nor PPH is an absolute contraindication to IPP implant placement.**
- **Maternal complications of pregnancy,** such as pre-eclampsia or gestational diabetes, generally do not contraindicate IPP LARC placement.

Section 6: IPP LARC Procedures

All health care providers and physicians performing LARC insertions must complete appropriate training. There are many online and in-person options available to assist with clinical instruction, such as the [ACOG LARC Program](#) (37). **Appendix 1** of this toolkit contains an extended list of available resources for LARC training. Although the use of IUDs and implants immediately postpartum is off-label, both [ACOG](#) (4) and the [CDC](#) (33) support IPP LARC insertions. Through this toolkit and the Maryland IPP LARC initiative, hospitals may be able to arrange training for IPP LARC implementation.

6.1. IPP LARC Insertion Techniques

Providers new to IPP LARC should undergo training and education in insertion techniques. While IPP IUD insertions, in particular, require additional training, techniques are relatively straightforward to learn. The following information is intended as an overview, and more detailed education is available through the Maryland

IPP LARC training program. ACOG District II has posted a video series on LARC, including a video on post-placental insertion that may be helpful (https://cfweb.acog.org/district_ii/larc/section4.html). Toolkits and videos are not meant to serve as comprehensive training, nor to replace essential hands-on practice and experience.

6.1.1 Implants

Providers who want to perform implant insertions and removals must complete manufacturer-sponsored training through Merck (information at www.nexplanon.com). The technique for immediate postpartum placement of implants is the same as for interval insertion. Though immediate postpartum implant placement is an off-label use of the method, its safety and efficacy is supported by evidence.

6.1.2. Intrauterine Devices

Immediate postpartum IUD placement differs from interval insertion technique. Best practice for IPP IUD insertion is to place the IUD in the delivery or operating room, within 10 minutes of placental delivery in vaginal and cesarean births (8). IUD placement within 48 hours of delivery is also an acceptable option. A brief description of key placement steps for immediate postplacental insertion follows below, with more details included in **Appendix 6**. References to additional resources and sample checklists, order sets, and patient instructions are available in **Appendix 3**.

Immediate Postplacental IUD Insertion after Vaginal Delivery

Possible insertion techniques include manual, instrument-guided, or using the manufacturer's inserter off-label.

General approach. The first step to IPP IUD placement is to confirm placental removal and adequate uterine tone, and assess whether repair of any perineal lacerations can be delayed until after IUD placement. While real-time ultrasound is not mandatory, providers may prefer to use it, especially when first providing IPP LARC. Differences from interval insertion techniques include that uterine sounding should be avoided, and speculum and retractors are often not needed to visualize the cervix. They can be used if needed, though may cause more discomfort to the patient. Often, the cervix can be safely accessed without need for instrumentation. Regardless of technique, strings can be trimmed after placement to just below the level of the external os. Alternatively, strings can be trimmed to about 10 cm length prior to IUD insertion into the uterus.

A. Manual insertion technique. With manual insertion techniques, the provider removes the IUD from the inserter, and holds it gently but firmly between fingers of the dominant hand. The uterus can be stabilized with the other hand, and the hand holding the IUD passed through the open cervix until the IUD is at the

uterine fundus. Ultrasound guidance during this step can help to confirm correct placement of the IUD. Once in position, the provider can release the IUD and carefully retract her/his hand from the uterus.

- B. Ring forceps insertion technique.** For insertion with ring forceps, the provider removes the IUD from the inserter, and grasps the IUD gently with the instrument, avoiding compression of the vertical arm. The forceps/IUD are then passed through the cervix and advanced to the fundus. The cervix can be stabilized with another ring forceps if needed. Once at the fundus, the provider opens the ring forceps and gently slides them off the IUD, releasing the IUD in position. The forceps are then carefully removed, leaving the IUD in place. Ultrasound guidance can help to confirm correct direction and placement.
- C. Inserter technique.** Current IUD inserters were not designed for PP IUD insertion. Thus, the inserter technique may not be the best approach if other alternatives are available. If the provider chooses to use the inserter, the IUD is loaded into the inserter according to manufacturer instructions, taking care to move the flange to its most distal position or remove it completely. The provider then passes the inserter through the cervix and gently advances to the fundus. The provider's other hand can stabilize the fundus during placement. When the inserter reaches the fundus, the provider then deploys the IUD according to manufacturer instructions. Ultrasound guidance can help to confirm correct direction and placement. When the inserter is removed from the uterus, the provider must verify that the inserter was removed intact.

Immediate Postplacental Insertion during Cesarean Delivery

For IPP IUD insertion during cesarean delivery, the IUD is placed through the open hysterotomy incision. After removal of placenta, the provider verifies adequate hemostasis/uterine tone, and initiates suture closure of the uterine incision. Prior to closing the incision, the IUD can be placed at the fundus using manual, ring forceps, or inserter techniques. IUD strings are then directed downward through the open cervix. Strings are trimmed to a length long enough to pass through the internal cervical os, prior to this step. The provider then completes the hysterotomy closure. Since the uterus is often exteriorized or directly visualized during cesarean delivery, ultrasound guidance is generally not needed.

What about IUD Strings?

IUD strings will usually descend through the cervix during the postpartum period. This can cause strings to lengthen. Strings can be trimmed at the postpartum visit, or sooner if needed. If lengthening strings raise concern for IUD malposition or expulsion, consider obtaining an ultrasound to confirm position.

Providers seeking more guidance in immediate postpartum IUD insertion can find training opportunities through the ACOG web site (www.acog.org), which also links to other resources such as webinars, information on coding and reimbursement, and patient education materials. Links to some of these resources are presented in [Appendix 1](#).

6.2. LARC Device Removal

Women using LARC methods should have the option of removal upon request. Medicaid Fee for Service and Medicaid MCOs cover LARC removal. Providers can consult the Medicaid OB/Gyn Family Planning Manual (38) or the [LARC Factsheet](#) (39) for details. For women insured through private companies, removal reimbursement may vary. Policies that cover insertion generally cover removal.

Techniques for removal of IPP LARC are similar regardless of placement timing. All providers removing Nexplanon® implants must have manufacturer training by a Merck representative (www.nexplanon-training.com). Recommendations for complicated implant removal can be found in a [USAID document](#) on deep implant removal (40) and video by [Jhpiego](#).

[Techniques for difficult IUD removal](#) include using a cytobrush or IUD hook to locate missing strings, or utilizing ultrasound or hysteroscopic guidance (41). Providers with limited experience in complex LARC removals may opt to refer to a provider with more experience.

6.3. IUD Expulsion and Perforation following IPP Placement

The likelihood of expulsion for a postpartum IUD is higher than after an interval insertion, possibly as high as 10-27% [See ACOG [Immediate Postpartum IUD Expulsion Fact Sheet](#) (42)]. It is important to counsel women about signs and symptoms of expulsion (e.g., abdominal pain, missing strings, seeing the IUD). If a woman suspects expulsion, she should contact her provider. Most women will be able to recognize their own expulsions (43). The risk of expulsion decreases with increasing provider experience (43).

Since many women who wait to have an IUD placed may never actually receive it, the increased risk of expulsion may be outweighed by the higher chance of loss to follow up (8). The risk of perforation after postpartum IUD insertion is low. The overall perforation risk is estimated at about 2 per 1000 IUD placements. Breastfeeding and the postpartum period may increase perforation risk. A large study estimated perforation risk at 5 per 1000 IUD users who were breastfeeding and less than 36 weeks postpartum (44).

Product Replacement following IUD Expulsion

Women who experience IUD expulsion may want a replacement. Some payers limit the number of IUDs that a woman can obtain within a certain timeframe. The provider or patient should check with the insurance company to determine eligibility. Some manufacturers will replace a device expelled shortly after placement. The provider should contact the manufacturer (contact information in this document or on packaging) to answer any questions about their policies.

KEY POINT: Despite the slightly higher expulsion rate of immediate postpartum IUD placement over interval placement, evidence strongly suggests the superiority of immediate placement in reduction of unintended pregnancy, especially for those at greatest risk of not having recommended postpartum follow-up.

Section 7: Hospital Pharmacy Stocking

The CDC and U.S. Office of Population Affairs (OPA) recommend stocking a range of contraceptive methods (45). Optimally, LARC devices are on formulary and adequately stocked to facilitate service provision.

7.1. Pharmacy Formulary

Pharmacists who practice in hospitals currently placing IPP LARC recommend the following:

- **Place LARC devices on the hospital inpatient formulary list.** Contacts for ordering LARC devices from the various manufacturers/suppliers can be found in Appendix 5.
- **Make devices available on the Labor and Delivery or postpartum units, if possible.** This can be done by stocking them in automatic medication dispensing systems. Alternatively, a LARC intended for IPP placement can be ordered from the central pharmacy when the patient is admitted in labor, and held at the bedside, or on the unit, until needed.

7.2. How Many to Order? Forecasting Initial IPP LARC Demand

Several strategies may help forecast the number of IUDs and implants needed. These strategies include:

- Determining the number of LARC devices placed in a recent time period.
- Surveying currently pregnant patients for interest in IPP LARC devices.
- Calculating the proportion of patients with coverage for IPP LARC, the number of providers who will offer the service, and the number of deliveries. Assessment of interest does not replace counseling and does not commit the patient to IPP LARC. The Maryland IPP LARC Initiative may be able to assist with evaluating need.

Section 8: Reimbursement

8.1. Billing and Coding

Medicaid will reimburse for insertion procedures, LARC devices and supplies, consistent with Health Service Cost Review Commission (HSCRC) policy. These can be billed in addition to the global obstetrical fee or delivery charges. Consult the [Maryland Provider Information resource website](#) for detailed billing guidance. A list of relevant codes, last updated February 2019, appears in Table 6. ACOG also has a [‘billing quiz’](#) with examples of LARC billing/coding scenarios (46) and provides [coding and reimbursement resources](#) through the LARC Program (47).

Table 6: Codes for Inpatient LARC Billing

The [ACOG LARC Coding Guide](#) (48) can serve as a useful reference, however coding may be updated at any time, so please check with online references or your hospital resources if you have questions.

Codes for Inpatient LARC Billing	
HCPCS CODES	
J7296	Levonorgestrel Intrauterine contraceptive, 19.5 mg (Kyleena®)
J7297	Levonorgestrel Intrauterine contraceptive, 52mg (Liletta®)
J7298	Levonorgestrel Intrauterine contraceptive, 52mg (Mirena®)
J7300	Intrauterine Copper contraceptive (ParaGard®)
J7301	Levonogestrel Intrauterine contraceptive 13.5mg (Skyla®)
J7307	Etonogestrel contraceptive implant (Nexplanon®)
ICD-10 CODES	
Z30.017	Encounter for initial prescription of implantable subdermal contraceptive (<u>includes</u> insertion)
Z30.046	Encounter for surveillance of implantable subdermal contraceptive (<u>includes</u> checking, removal, or reinsertion)
Z30.014	Encounter for initial prescription of intrauterine contraceptive device (<u>excludes</u> insertion)
Z30.430	Encounter for insertion of intrauterine contraceptive device
Z30.431	Encounter for routine checking of intrauterine contraceptive device
Z30.432	Encounter for removal of intrauterine contraceptive device
Z30.433	Encounter for removal and reinsertion of intrauterine contraceptive device
CPT CODES	
58300	Insertion of intrauterine device
58301	Removal of intrauterine device
11981	Insertion of contraceptive implant
11982	Removal of contraceptive implant
11983	Removal with reinsertion of contraceptive implant

8.2. Reimbursement/Replacement for Failed Insertions

Occasionally, an opened LARC device is not used. The provider may be able to bill for an unsuccessful insertion using modifiers. Many commercial plans will reimburse the cost of LARC devices from failed insertions, but most public payers do not. Providers should check with specific payers to determine their reimbursement policies. Manufacturers provide replacement LARC devices under some conditions. Contact the manufacturer or distributor by phone, or visit the product websites for detail. Most companies consider replacements on a case-by-case basis.

Section 9: Challenges and Barriers

9.1. Challenges to Implementation

Despite best intentions, there can be challenges to implementation of an IPP LARC program. Overcoming these barriers requires a comprehensive strategy, involving patients, providers, health care administrators, legislators, and often, the local community (7). Highlighted below are some challenges to IPP LARC program implementation.

- **Provider skills.** This is a surmountable obstacle to IPP LARC provision (7). ACOG has numerous resources to facilitate provider education for members; Appendix 1 has links to many of these resources.
- **Provider practices** can also be adapted to facilitate LARC provision. A 2014 ACOG survey indicated that most ACOG Fellows provide IUDs. However, many enforce additional requirements prior to placement, such as a separate visit for counseling, STI testing, or cervical cancer screening (49). None of these are supported by existing guidelines.
- **Logistical challenges.** Providers in a 2014 ACOG survey indicated that lack of knowledge and competing priorities were barriers to implementation. (50) A 2018 ACOG survey indicated that practice setting, device availability, and provider training continued to pose barriers (51). Resources at the national (ACOG) and state level can help manage problems that arise. (See [Appendix 1](#))

9.2. Coverage for LARC: Will We be Reimbursed?

It may be challenging for hospitals to initiate and budget for an advance-purchase model for LARC devices. Maryland Medicaid provides coverage for LARC devices, including IPP LARC, for women covered under its plans. In addition, under the Affordable Care Act (ACA), most private insurance companies also provide coverage for LARC devices. Further, the **Maryland Contraceptive Equity Act**, which went into effect on

January 1, 2018, limits requirements for prior authorization for LARC (52). Thus, reimbursement is realistic for hospitals that purchase devices in advance.

9.3. Myths and Misconceptions

Available LARC devices are safe, quickly reversible, and highly acceptable. While many more providers and users recognize the benefits of long-acting reversible contraception, several misconceptions can persist. These often stem from lingering suspicion of obsolete devices or questionable practices. A few are cited below.

IPP LARC Misconceptions

- “LARCs should be placed at the postpartum visit, not immediately after delivery.” Many women do not attend their postpartum visit, and 40–75% of women who plan to use an IUD postpartum do not obtain one (4).
- “IPP LARCs are not safe to use.” Although insertion of LARC immediately postpartum is considered off-label use, LARC are safe and effective, and supported by the U.S. MEC, as well as ACOG (8, 33).
- “IUDs increase the risk of Pelvic Inflammatory Disease (PID)”. The risk of PID is about 1% after IUD insertion. This risk is highest in the first 20 days after IUD insertion. However, IUDs do not increase the risk of PID, even in patients who have multiple partners (53). Active PID is a reason to delay insertion, but a history of previous PID is not (33).

Appendix 1: Selected Web Resources

The following resources informed and supplement the information presented in the toolkit.

General Information

Long-acting Reversible Contraception: Implants and Intrauterine Devices. Practice Bulletin No. 186. ACOG. Obstet Gynecol 2017;130:e251-69. <https://www.acog.org/-/media/Practice-Bulletins/Committee-on-Practice-Bulletins---Gynecology/Public/pb186.pdf?dmc=1&ts=20190319T1639279013>

Provides an overview of the LARC available in the U.S., LARC eligibility, possible timings of insertion, and answers relevant clinical questions.

Curtis KM, Tepper NK, Jatlaoui TC, et al. **U.S. Medical Eligibility Criteria for Contraceptive Use, 2016.** MMWR Recomm Rep 2016;65 (No. RR-3):1-104.

https://www.cdc.gov/mmwr/volumes/65/rr/rr6503a1.htm?s_cid=rr6503a1_w

Includes detailed information about who is/is not a candidate for various contraceptive methods given certain medical conditions.

Curtis KM, Jatlaoui TC, Tepper NK, et al. **U.S. Selected Practice Recommendations for Contraceptive Use, 2016.** MMWR Recomm Rep 2016;65 (No. RR-4):1-66.

https://www.cdc.gov/mmwr/volumes/65/rr/rr6504a1.htm?s_cid=rr6504a1_w

Addresses common issues regarding initiation and use of specific contraceptive methods.

Clinical Education and Training: LARC Clinical Training Opportunities. ACOG.

<https://www.acog.org/About-ACOG/ACOG-Departments/Long-Acting-Reversible-Contraception/LARC-Clinician-Education-and-Training>

Includes links to method-specific insertion/removal videos and requests for training, as well as other clinical training opportunities.

Immediate Postpartum Long-acting Reversible Contraception. Committee Opinion No. 670. ACOG. Obstet Gynecol 2016;128:e32-7.

<https://www.acog.org/-/media/Committee-Opinions/Committee-on-Obstetric-Practice/co670.pdf?dmc=1&ts=20190318T1724233626>

Overview of Use, Benefits, Risks, and Safety of Immediate PP LARC

Whitaker AK, Chen BA. **Society of Family Planning Guidelines: Postplacental Insertion of Intrauterine Devices.** *Contraception* 2018;97 (1):2-13.

[https://www.contraceptionjournal.org/article/S0010-7824\(17\)30473-0/pdf](https://www.contraceptionjournal.org/article/S0010-7824(17)30473-0/pdf)

Specifically addresses clinical questions including the risks and benefits of immediate postpartum IUD insertion, expulsion, the role of ultrasound in placement, and breastfeeding.

ACOG Immediate Postpartum LARC Website

<https://www.acog.org/About-ACOG/ACOG-Departments/Long-Acting-Reversible-Contraception/Immediate-Postpartum-LARC>

Includes links to relevant committee opinions, resource digests, and additional resources.

LARC Placement Guidance

Immediate Post-Placental LARC Insertion. ACOG. https://cfweb.acog.org/district_ii/larc/section4.html

Video that discusses post-placental IUD insertion and demonstrates techniques for IUD placement after vaginal and cesarean deliveries.

Immediate Postpartum IUD Expulsion Fact Sheet. ACOG. June 6, 2018. <https://www.acog.org/-/media/Departments/LARC/IPP-LARC-Expulsion-Replaceable.pdf?dmc=1&ts=20190318T175111782>

Discusses risks of IUD expulsion when IUDs are placed immediately postpartum, as well as Medical Eligibility Criteria for immediate postpartum IUD insertion.

ACOG Immediate Postpartum LARC Website

<https://www.acog.org/About-ACOG/ACOG-Departments/Long-Acting-Reversible-Contraception/Immediate-Postpartum-LARC>

Includes links to relevant committee opinions, resource digests, and additional resources.

Patient Information

FAQ 500: Using Long-Acting Reversible Contraception Right After Childbirth. ACOG. March 2018.

<https://www.acog.org/-/media/For-Patients/faq500.pdf?dmc=1&ts=20190318T1730024570>

Informational sheet that can be shared with patients during postpartum contraceptive counseling.

LARC Removal

Clinical Challenges of Long-Acting Reversible Contraceptive Methods. Committee Opinion No. 672. ACOG. *Obstet Gynecol* 2016;128:e69–77. <https://www.acog.org/-/media/Committee-Opinions/Committee-on-Gynecologic-Practice/co672.pdf?dmc=1&ts=20190318T1746129276>

Evaluating and managing complications, including non-visualized IUD strings, difficult IUD removal, and non-palpable implant.

Implementation Guidance

Maryland Medicaid LARC Billing Guidelines

[https://mmcp.health.maryland.gov/Documents/Factsheet4_Long-](https://mmcp.health.maryland.gov/Documents/Factsheet4_Long-Acting%20Reversible%20Contraceptives%20(LARCs).pdf)

[Acting%20Reversible%20Contraceptives%20\(LARCs\).pdf](https://mmcp.health.maryland.gov/Documents/Factsheet4_Long-Acting%20Reversible%20Contraceptives%20(LARCs).pdf) provides billing codes and instructions for billing Maryland Medicaid for LARC.

Intrauterine Devices & Implants: A Guide to Reimbursement

<https://larcprogram.ucsf.edu/>

This website has the most up-to-date information about LARC reimbursement, as well as information about stocking LARC

Hofler LG, Cordes SC, Cwiak CA, Goedken P, Jamieson DJ, Kottke M. **Implementing Immediate Postpartum Long-acting Reversible Contraception Programs.** *Obstet Gynecol* 2017;129(1):3-9.

https://journals.lww.com/greenjournal/fulltext/2017/01000/Implementing_Immediate_Postpartum_Long_Acting.2.aspx

This study of IPP LARC programs in Georgia provides lessons regarding the most important implementation steps and barriers.

Appendix 2: Sample Checklist, Order Set, Procedure Note, and Patient Instructions for Postpartum Implant Insertion

Contraceptive Implant Insertion

SAMPLE PRE-INSERTION CHECKLIST

The following should be performed/available prior to delivery:

- Verification of insurance coverage for device/insertion
- Informed consent signed and witnessed
- Nexplanon® and Lidocaine ordered and available
- Additional supplies in room (can be in a pre-made Nexplanon insertion kit) including:
 - Disposable gloves
 - Syringe and needle for drawing up and dispensing Lidocaine
 - Chlorhexadine, Betadine, and/or alcohol for skin cleaning
 - 2x2 or 4x4 gauze pads
 - Steri-strips and scissors, or band-aid
 - Gauze bandage roll and tape
- Perform time-out, including confirmation of patient ID, procedure to be performed, and side/site of insertion.

SAMPLE ORDER SET

Medications:

- Etonogestrel 68 mg implant (Nexplanon®) subcutaneous for insertion by provider prior to discharge
- Lidocaine 1% 3-5 ml SBQ x 1 dose for Etonogestrel insertion

Procedure (CPT):

- Insertion, non-biodegradable drug implant (CPT 11981)

SAMPLE PROCEDURE NOTE

Postpartum Nexplanon® Insertion Procedure Note

Pre-procedure diagnosis: Patient desires insertion of contraceptive implant in [L/R] arm

Post-procedure diagnosis: Same

Procedure Performed by: _____

Assistant(s): _____

Anesthesia: 1 lidocaine, __ mL

After a discussion of risks, benefits, and alternatives, informed consent was obtained. Time-out was performed. The insertion location was identified and marked on the (right/ left) arm. Area was prepped in the normal sterile fashion with (Betadine/Hibiclens/alcohol). 1% lidocaine was injected. The Nexplanon® was inserted in the usual fashion according to manufacturer's instructions. Good hemostasis was noted. (Steri-strips/band-aid) placed over insertion site. Rod was palpated by provider (and patient) at end of procedure. Gauze wrap applied.

Nexplanon® Lot # _____,

Expiration date _____

EBL: [minimal]

Complications: _____

SAMPLE NEXPLANON® PATIENT INSTRUCTIONS

- Keep the wrap on your arm for 24 hours. You may remove the band-aid/steri-strips in 2-3 days.
- You may have some pain and bruising at the insertion site. You can use ice packs and ibuprofen to help with this.
- Your periods will likely be different not only in the postpartum period, but also with Nexplanon®. Some women have no periods, some have heavier or lighter periods, and some women have irregular bleeding. All of these types of bleeding can be normal, but if you have concerns, call your doctor.
- If you develop any signs of infection near the insertion site (redness, swelling, discharge), please contact our office.
- Your Nexplanon® is due for removal in 3 years.¹
- If you have any question or concerns, please contact our office at: _____

¹ Evidence supports implant effectiveness up to 4 years (off-label use). Product labeling is for 3 years of use. Providers can determine how they counsel patients.

Appendix 3: Sample Checklist, Order Set, and Patient Instructions for Immediate Postpartum IUD Insertion

IUD Insertion

SAMPLE PRE-INSERTION CHECKLIST

The following should be performed/available prior to delivery:

- Verification of insurance coverage for device/insertion (prior to delivery)
- Informed consent signed and witnessed (prior to delivery)
- IUD ordered and available at bedside (or immediately available)
- Supplies available at bedside or in the Operating Room:
 - Sterile gloves
 - Ring forceps (2)

The following should be performed immediately after delivery and prior to IUD insertion:

- Confirm patient still desires IUD insertion
- Perform time-out, including confirmation of patient ID and procedure to be performed.

SAMPLE ORDER SET

Medications:

- Levonorgestrel-releasing intrauterine system, 52 mg (Mirena[®])
- Levonorgestrel-releasing intrauterine system 52 mg (Liletta[®])
- Levonorgestrel-releasing intrauterine system 19.5 mg (Kyleena[®])
- Levonorgestrel-releasing intrauterine system 13.5mg (Skyla[®])
- Copper intrauterine device (ParaGard[®] T 380)

Procedure (CPT):

- Insertion of intrauterine device (CPT 58300)

SAMPLE PROCEDURE NOTES

Example: LNG-IUS

Post Vaginal Delivery LNG-IUS Insertion Procedure Note

Date: _____

Pre-procedure diagnosis: Patient desires long-acting reversible contraception, s/p SVD

Post-procedure diagnosis: Same

Procedure Performed by: _____

Assistant(s): _____

Anesthesia: _____

After a discussion of risks, benefits, and alternatives, informed consent was obtained. Time-out was performed. [The anterior lip of the cervix was grasped with a ring forceps.] The LNG-IUS was inserted using the [ring forceps/manual insertion technique/insertor] to the fundus [under ultrasound guidance]. [The strings were trimmed to the level of the external os.]

IUD Lot # _____, Expiration date: _____

EBL: _____ [additional EBL, if any, beyond what was noted for vaginal delivery]

Complications: _____

To be included in Cesarean Section Operative Note:

[Closure of the hysterotomy was initiated.] Prior to completion of the uterine closure, the IUD was inserted through the hysterotomy site to the level of the fundus using the [ring forceps/manual insertion technique/insertor]. The strings were then trimmed to 10 cm, and a ring forceps was used to direct the strings to the internal cervical os.

IUD Lot # _____,

Expiration date _____.

The remainder of the hysterotomy was closed...

SAMPLE POSTPARTUM IUD PATIENT INSTRUCTIONS

Note: These instructions apply to patients receiving an IUD after vaginal delivery or cesarean section.

- Cramping is normal after an IUD insertion. You can use ibuprofen or similar over-the-counter medications to help with this.
- You may notice that your IUD strings appear to lengthen as your uterus gets back to normal size. If you notice this, DO NOT pull on the strings. You can push the strings back inside your vagina. Make an appointment to be seen in clinic. Your strings may need to be trimmed, and your provider may want to make sure the IUD is still in the right place.
- **For LNG-IUS:** Your periods will likely be different not only in the postpartum period, but also with the hormonal IUD. Women using hormonal IUDs frequently have lighter periods and some women do not have a period at all. Irregular menstrual bleeding is common for up to six months after insertion. If you have concerns, please contact your health care provider.
- **For Copper IUD:** Your periods will likely be different not only in the postpartum period, but also with the IUD. Some women experience slightly heavier or more painful periods with the copper IUD in place. This can be normal. If you have concerns, please contact your health care provider.
- The risk of IUD expulsion (that the IUD falls out) is increased when the IUD is placed immediately after delivery. This is not dangerous, but if the IUD falls out you will not be protected against pregnancy and will need other birth control. Call your health care provider if this happens.
- Call your health care provider with any of the following: severe pain, nausea, and vomiting, fever or chills, if the IUD is expelled, or if you have any other questions or concerns. We can be reached at: _____

Appendix 4: Immediate Postpartum LARC: Counseling and Consent Points

Counseling and general principles of informed consent are discussed above. Each hospital or institution will generally have its own requirements for documentation, and so a “sample consent form” is not provided here. However, key points are reiterated below. Additional information can be found in the prescribing information, package inserts, and manufacturer websites. These are intended as reminders and do not replace a thorough discussion and informed consent process between provider and patient.

General Considerations:

- Women’s contraceptive decisions are voluntary. Providers should not ‘push’ LARC methods.
- Patients should be aware that they may request LARC removal at any time. LARC removal does require a visit to a licensed health care provider. Maryland Medicaid will pay for removals of devices for those with coverage.
- LARCs do not protect against sexually transmitted infections (STIs).
- Most studies show that hormonal LARCs do not interfere with breastfeeding.

Subdermal Implant:

- The subdermal contraceptive protects against pregnancy for at least 3 years.
- **Possible risks of placement:**
 - Bruising and swelling in the arm where it was placed
 - Scarring of the skin
 - Migration of implant
 - Deep placement
 - Difficult removal
 - Skin infection (rare)
 - Allergic reaction (rare)
 - Injury to surrounding organs (rare)
- **Bleeding pattern:** Spotting and irregular bleeding are common. Patients may have more bleeding, less bleeding, or no bleeding. While many individuals will have less bleeding overall, the pattern can be unpredictable.
- Individuals with an implant should be able to palpate the rod under the skin. If the implant is no longer palpable, the woman should see a health care provider for assessment.
- **Pregnancy risk:** <1 in 100. The implant is probably the most effective reversible contraceptive currently available.

Intrauterine Device:

- **Length of Effectiveness/Protection against Pregnancy**, according to label:
 - Progestin IUD: 3-7 years (depends on formulation)
 - Copper IUD: 10 years
 - Evidence suggests that these devices are effective for longer periods than labeled, up to 7 years for the highest dose progestin IUDs, and 12 years for copper IUD
- **Possible Risks of Placement:**
 - Irregular bleeding
 - Expulsion (10-27%)
 - Hormonal side effects (LNG)
 - Perforation (rare)
 - Allergic reaction (rare)
- If a woman is concerned that her IUD may have fallen out (expelled), she should contact her health care provider and use a back-up contraceptive method.
- **Bleeding patterns:** Irregular bleeding and cramping are common for women in the first few months after an IUD is inserted. Ibuprofen or a heating pad may help with these symptoms.
 - Women with progestin IUDs may get lighter periods or the periods may disappear entirely over time. This is not dangerous.
 - Women with copper IUD may get heavier or longer periods initially, though this usually resolves.
 - For both types of IUDs, the likelihood of spotting or irregular bleeding is highest in the first few months.
- **Pregnancy risk:** <1 in 100.
 - If a pregnancy does occur, there is an elevated risk of ectopic pregnancy
 - If an intrauterine pregnancy occurs, there is an elevated risk of miscarriage, preterm birth, or other complications

Appendix 5: LARC Manufacturers and Suppliers

Device manufacturers have several procurement options. Each hospital will likely need to establish its own contract with each manufacturer. Prices may fluctuate over time and are not listed in this document.

- A. **Allergan/ Medicines360 (LNG-IUS)**. Allergan distributes the Medicines360 LNG-IUS, Liletta®. As of March 2019, tiered pricing estimates are available at: <https://www.lilettahcp.com/en/resources#purchasing-options> . Liletta is also available at 340B pricing for eligible purchasers. Providers can place a wholesale order by registering and ordering online or calling. The patient assistance program may reduce the cost for eligible individuals. [\[https://www.lilettaaccessconnect.com/#Public \]](https://www.lilettaaccessconnect.com/#Public)
- B. **Bayer Products (LNG-IUS)**. As of March 2019, tiered pricing estimates and ordering options are available at: https://www.whcsupport.com/documents/PP-290-US-0740_VDP_Flashcards.pdf. The ARCH Patient Assistance Foundation may provide IUDs for patients meeting financial eligibility criteria. (https://www.pparx.org/prescription_assistance_programs/bayer_arch_foundation_1.)
- C. **CooperSurgical (Copper IUD)**. The Copper IUD (Paragard ®) can be ordered through CooperSurgical. (<https://www.paragarddirect.com/>) Providers can place a wholesale order online or call the company.
- D. **Merck (Etonorgestrel Implant)**. Nexplanon® is manufactured by Merck, which distributes it via CuraScript and TheraCom. (www.merckconnect.com/nexplanon/coverage/ordering-nexplanon) To purchase contraceptive implants, practices must have at least one licensed clinician who has completed Nexplanon® training and received a training certificate.

Providers can also contact the manufacturer for additional guidance.

- **Kyleena®, Mirena®, and Skyla®**: Bayer, 1-888-842-2937, Option 2, then follow prompts
- **Liletta®**: Allergan AccessConnect, 1-855-545-3882, Option 9
- **Paragard IUD®**: CooperSurgical, 1-877-727-2427 (PARAGARD), Option 1, Option 4
- **Nexplanon®**: Merck, 1-800-672-6372 (NSC-MERCK), Option 1, Option 2, Option 1

Appendix 6: LARC Side Effects

Some side effects of LARC are briefly discussed below.

- **Irregular bleeding or change in menstrual pattern**, particularly in the first few months after insertion. *Irregular bleeding can also occur in the postpartum period, particularly with breastfeeding.* Patient counseling should include discussion that any changes in expected bleeding compared to pre-pregnancy patterns may not be solely due to LARC. Persistent concerns or worsening of bleeding patterns over time may warrant investigation for infection, malposition, pregnancy, or other anatomic causes.
 - **Hormonal IUDs** are generally associated with progressively less bleeding, due to long-term effects of progestin on the endometrium.
 - **Copper IUDs** may be associated with spotting or heavier menstrual flow in the first few months after insertion, but this will resolve with time in most users.
 - **The Etonogestrel Implant** is associated with an “unpredictably unpredictable” bleeding pattern, although generally the trend is toward fewer days of bleeding than with monthly cycles. Based on clinical trials, infrequent bleeding or amenorrhea were the most common patterns. However, frequent and prolonged bleeding patterns were also seen. Approximately 10% of users may discontinue because of dissatisfaction with bleeding.
- **Cramping/dysmenorrhea.** Some women may experience cramping after IUD placement. This should improve over time and can usually be managed with over-the-counter medication, such as NSAIDs. Persistent, severe, or worsening cramping in someone with an IUD warrants investigation for causes such as infection or IUD malposition.
- **Hormonal side effects.** Some users of progestin LARC methods may experience systemic side effects associated with progestin use.
 - **Hormonal IUDs** work largely through local effects, but there can be systemic hormone absorption, particularly in the first weeks to months after insertion, that may cause hormonal side effects in some women.
 - **Implant insertion** is associated with an initial “burst” of systemic progestin, which may contribute to systemic side effects in the first weeks to months of use. These should also improve over time. If a woman is dissatisfied with perceived side effects despite reassurance, device removal may be an option.

Appendix 7: Insertion techniques for IPP IUD

Immediate Postplacental IUD Insertion after Vaginal Delivery

Several possible techniques for insertion include manual, instrument-guided, or using the manufacturer's inserter off-label.

General Approach:

- Confirm complete placental removal and adequate uterine tone. If perineal lacerations are present, assess whether the repair can be delayed until IUD placement.
- Consider use of ultrasound guidance. Providers may prefer to use ultrasound, especially when first providing IPP LARC, but use of ultrasound is not mandatory.
- **DO NOT SOUND THE UTERUS.** This is unnecessary and increases risk of perforation.
- Speculum and retractors are often not needed to visualize the cervix. They can be used if needed, though they may cause more discomfort to the patient. Often, the cervix can be visualized and palpated without need for instrumentation.
- **Tips for manual, ring forceps, and inserter techniques follow below.** Generally, insertion may be more uncomfortable for women without anesthesia.

Manual Insertion Technique:

- Use a new pair of sterile gloves.
- Remove the IUD from the inserter.
- Hold the IUD gently but firmly between index and middle fingers of dominant hand.
- Stabilize uterine fundus abdominally with non-dominant hand.
- Visualize or palpate cervix.
- Pass dominant hand, holding IUD, gently through open cervix to fundus. Ultrasound guidance during this step can help to confirm correct placement.
- Release fingers holding IUD, separating enough to allow IUD release.
- Carefully remove hand from uterus without dislodging IUD.
- Trim strings just below the level of the external os. [Alternatively, trim strings to about 10cm prior to insertion into the uterus.]

Ring Forceps Insertion Technique

- Remove the IUD from the inserter. (If touching IUD, use a new pair of sterile gloves)
- Grasp the side arms of the IUD **gently** with ring forceps (do not “click”).
 - Avoid compressing the copper or hormone reservoir on the vertical arm with the forceps.
 - Be sure the strings are not grasped in the forceps ring or wrapped around the handles.
- Pass the forceps with IUD through the cervix and gently advance to the fundus. If preferred, grasp the anterior lip of the cervix with a second ring forceps to stabilize it prior to insertion. Ultrasound guidance during this step can help to confirm correct direction and placement.
- If not using a second ring forceps on the cervix, stabilize uterine fundus abdominally with non-dominant hand during insertion.
- Open the ring forceps. Gently slide the forceps off the IUD.
 - The slight position change helps to make sure the forceps release the IUD in position.
 - Avoid large or uncontrolled movements that may damage the uterine wall.
- Carefully remove the forceps, taking care not to catch the string. Ultrasound can also help to visualize forceps removal and confirm that the IUD remains in place.
- Trim strings just below the level of the external os. [Alternatively, strings can be trimmed to approximately 10cm prior to insertion.]

Inserter Technique

Current IUD inserters were not designed for PP IUD insertion, which is considered off-label use. Some inserters are too short and difficult to use in the postpartum uterus. There have also been case reports of inserter components remaining in the uterus after PP IUD placement. If the provider chooses to use the inserter, the following steps may apply.

- Load the IUD into the inserter. For devices with a flange, move the flange all the way down to the handle. For inserters with removable flanges, if using, remove flange from the inserter and immediately off the field. **DO NOT SOUND THE UTERUS.**
- Pass the inserter through the cervix and gently advance to the fundus. Ultrasound guidance can help to confirm correct direction and placement.
- While advancing the inserter, stabilize uterine fundus abdominally with non-dominant hand. Alternatively, stabilize the cervix by gently placing a ring forceps on the anterior lip.
- Advance the inserter to the fundus and deploy according to manufacturer instructions. Ultrasound guidance during this step can help to confirm correct placement.

- Once the IUD is deployed, remove the inserter. Visually verify that the inserter was removed intact, and that all components are present.
- Trim strings just below the level of the external os.

Immediate Postplacental Insertion after Cesarean Delivery

For IPP IUD insertion during cesarean delivery, the IUD is placed through the open hysterotomy incision under sterile technique. The IUD can be placed on the sterile field once it is confirmed that IUD insertion will take place.

- After removal of placenta, verify adequate hemostasis/ uterine tone.
- Initiate suture closure of the uterine incision. Do not suture past the midline of the incision until the IUD is placed.
- Place the IUD at the uterine fundus. This can be done with ring forceps, with the inserter, or manually. Manual placement may be more challenging if the open part of the incision is small.
- Direct the IUD string through the open cervix. This can be done manually or with an instrument, such as a ring forceps. Long strings can be trimmed prior to this step. Prior to trimming, ensure strings are still long enough to pass through the cervical os when cut.
- Complete hysterotomy closure.
- Since the uterus is often exteriorized or directly visualized during cesarean delivery, ultrasound guidance is generally not utilized for IUD insertion.

Appendix 8: Challenges

Provider Challenges

- **Lack of Service Integration.** There is little integration of the hospital IPP LARC initiative with Baby Friendly Hospital initiatives or other existing programs on the L&D and postpartum units.
- **Inconsistent Contraceptive Counseling during the Prenatal Period.** It is often assumed that women are receiving contraceptive counseling during their prenatal visit, but there are currently no processes to determine if contraceptive counseling took place when the patient is in the labor and delivery unit.
- **Provider Discomfort.** Some providers are uncomfortable with inserting IUDs.
- **Siloed Care.** Often clinical and administrative support staff, such as lactation consultants and support techs, pharmacy, and billing staff are not included in counseling efforts. As a result, these individuals are not aware of policies and procedures for provision of IPP LARCs.
- **Training.** Clinicians may not be trained to provide appropriate, comprehensive counseling and consent for IPP LARCs. Standardized training helps avoid coercion and improper consent.
- **Cost.** IPP LARCs are not equally reimbursable for all patients, such as individuals who are uninsured or undocumented residents.
- **Internal Buy-in.** A clinician champion is absolutely necessary to have a successful IPP LARC program; even a resident taking this on as a Quality Improvement project can really help to move things forward.

Pharmacy Challenges

- **Hospital Formularies.** Often LARC devices are not included on the hospital pharmacy formulary. Achieving this can be a complex process and can vary from hospital to hospital.
- **Labor and Delivery availability.** Once the devices are on hospital formularies ensuring availability in the labor and delivery unit, rather than central pharmacy, can help to avoid delays. Devices for immediate postplacental placement can also be ordered from inpatient pharmacy at the time of patient admission, rather than waiting until she has delivered.
- **Stocking Restrictions.** There are specific rules regarding usage of devices based on funding used to purchase devices for inpatient care. For example, outpatient devices are eligible for 340B pricing, the Federal government program created to supply eligible organizations with reduced prices for outpatient medication, whereas inpatient devices are not eligible for 340B pricing. Therefore, inpatient and outpatient devices must be separated and distributed according to these guidelines.

- **Cost.** The high up-front cost of LARC devices can make it challenging for smaller hospitals to obtain these devices for immediate postpartum placement. Exploring bulk or 340b pricing may be an option.

Billing Challenges

- **Separate billing requirements.** IPP LARC placements performed by the clinicians are billed by the inpatient hospital, whereas the devices are billed by the pharmacy. Often providers and hospital billing staff aren't aware of this.
- **Documentation.** Training should ensure that clinicians are documenting and coding the procedures correctly and that practices are up-to-date.
- **Coding and Billing.** Coding and Billing training on IPP LARCs should be provided to staff to ensure proper reimbursement and how to manage rejection of claims.
- **Policy Dissemination.** Billers, in addition to providers, need to be included in conversations and education regarding IPP LARCs, as well as new procedures and policies for LARC coding and billing.

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