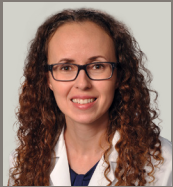
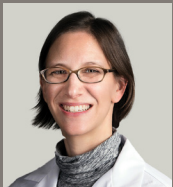




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BRIEFINGS FROM  
**WOMEN'S HEALTH EXPERTS**

**IUD Updates: What's New?**

By Sadia Haider, MD, MPH and Amber Truehart, MD, MS | Section of Family Planning

In recent years, there have been many advances in IUDs with new devices on the market. Additionally, there is growing evidence supporting their safety for use in adolescents, nulliparous women, and the immediate postpartum (PP) period. Hormonal IUDs containing the progestin levonorgestrel (LNG), are also approved for non-contraceptive benefits including management of heavy menstrual bleeding (1). Low-cost options for stocking devices and lower cost payment plans for patients are now available.

**New Devices: Welcome Skyla®, Kyleena®, and Liletta®**

There are several new LNG-releasing devices on the market.

Type of IUD	Paragard®	Mirena®	Skyla®	Kyleena®	Liletta®
<b>Lasts for</b>	10 years	5 years	3 years	5 years	5 years
<b>Hormones?</b>	None	52mg of LNG	13.5mg of LNG	19.5mg of LNG	52mg of LNG
<b>LNG release rate</b>	-	20mcg/day	6mcg/day	9mcg/day	19.5mcg/day
<b>Size of Device (Horizontal mm x Vertical mm)</b>	32 x 36	32 x 32	28 x 30	28 x 30	32 x 32
<b>Average cost of device</b>	\$500-739	\$950-1,070	\$700-900	\$950-1,070	Up to \$934 (\$50 at 340B clinics)

\*Getting an IUD can cost anywhere between \$0-1,300. IUDs can be free or low cost with many health insurance plans, Medicaid, and some other government programs.

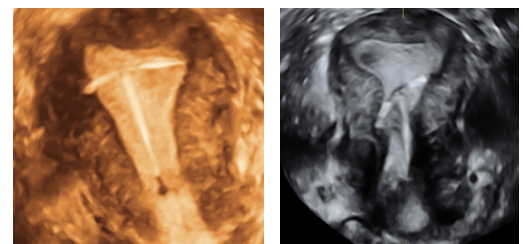
Skyla® and Kyleena® are smaller IUDs, which means they have the theoretical benefit of easier insertions in adolescents and nulliparous women who typically have smaller uteri. Overall, less hormone is released each day with Skyla® and Kyleena® compared to the Mirena® resulting in fewer women having amenorrhea at one year: 6% and 12% with Skyla and Kyleena®, respectively compared with 20% using Mirena®. For clinics having difficulty stocking IUDs due to cost, Liletta® can be purchased for \$50 through the 340B pricing program and is offered to patients for a subsidized cost using a sliding-scale fee based on income and insurance status. For women with health insurance requiring a co-pay of more than \$100 or with plans that do not offer contraceptive benefits, a Patient Savings Program through Medicines360, the company which makes Liletta®, allows women to obtain a Liletta® for no more than \$100.

See details: Liletta – Pricing <https://www.lilettahcp.com/en/resources> and [lilettacard.com](http://lilettacard.com)

**Use of 3D Ultrasound for evaluation  
 of IUD malpositioning**

A malpositioned IUD may be partially expelled, rotated, embedded in the myometrium, perforating the uterine serosa or found to be completely outside the uterus and within the abdominal cavity. All IUDs can be identified easily on ultrasound if one is familiar with their sonographic features. Three-dimensional ultrasound is useful in this setting because of the ability to view the coronal

*(continued on the other side)*



Malpositioned IUDs are shown in both images above.

(continued from the front)

plane of a transvaginal scan—a perspective that is not available on 2D systems. This visibility provides improved definition of the endometrium, and clinicians can see the complete shape of the IUD as well as its position within the uterus. The information gained from 3D ultrasound can be used in counseling women about possible need for IUD removal or surgical planning if the IUD is embedded within the myometrium and requires hysteroscopic or laparoscopic removal.

### Nonvisualized strings and other difficult removals

IUD strings are not visible on speculum exam in about 7% of women at routine checks or visits for removal (2). The differential diagnosis for non-visualized IUD strings includes IUD in situ with the strings inside the uterine cavity, unrecognized IUD expulsion, and IUD malposition or perforation.

Initially, we suggest bedside pelvic ultrasound to confirm IUD location. Once intrauterine position is confirmed, an attempt to tease the strings out of the external os with a cytobrush or alligator forceps is frequently successful. If not successful, techniques such as a paracervical block and/or ultrasound guidance can increase the success rate of in-office removal. You may also refer these patients to us.

For IUDs appearing embedded in the myometrium on ultrasound, follow-up hysteroscopy in one case series found that only 10% of these IUDs were actually embedded (3). In light of this evidence, we recommend a trial of traditional IUD removal in the office. If the IUD is not removed with moderate traction, suggesting a truly embedded IUD, hysteroscopic removal should be attempted.

### Immediate PP IUD placement

One-third of all pregnancies are conceived within 18 months of prior birth and are often unplanned (4). Pregnancies occurring within 18 months of a previous birth occur within a short inter-pregnancy interval and can be associated with poor maternal and neonatal outcomes such as premature rupture of membranes, preterm labor, and low birth weight infants (5). Half of all women miss their postpartum (PP) appointment and as a result do not receive PP contraception resulting in unplanned pregnancies. Thus, contraception counseling and provision prior to discharge from the hospital in the PP period is critically important to help women plan and appropriately time their pregnancies.

The American College of Obstetricians and Gynecologists supports immediate PP LARC, IUDs, and the contraceptive implant due to its safety, efficacy, and acceptability (6). In January 2019, the University of Chicago Family Birth Center started offering immediate post-placental IUDs after both vaginal and caesarean delivery.

### IUDs are safe in adolescents

The American College of Obstetricians and Gynecologists endorses the safety of IUDs for adolescents and recommends them as a first-line contraceptive option for adolescents (7). Previously there were concerns about IUD insertions in this population being more difficult. In a cohort of 1,177 adolescents and young women, successful IUD placement was achieved on first attempt in 96% of patients and the insertion was not more difficult in women <18 years of age compared to ≥18 years of age or in nulliparous adolescents compared to parous (8). Complications such as perforation with placement of IUDs are rare (<1/1000 risk) and there is no difference in the rates of complications between adolescents and older women. Placement and management of IUDs for adolescents should be the same as for all other women.

### IUD services we offer include:

- » Placement of IUDs in women:
  - › Women who have never been sexually active
  - › Adolescents
  - › Difficult insertions in the setting of fibroids, prior c/s, uterine rupture, a previously expelled IUD
- » 3D imaging of IUDs when there are missing strings or symptoms concerning for malpositioning (i.e., severe cramping, heavy bleeding)
- » IUD removals considered difficult in the setting of missing IUD strings or IUDs embedded in the myometrium
- » Work up and possible surgical management of fractured IUD/retained IUD fragment
- » Immediate post-placental IUD insertion in our Family Birth Center
- » Placement of all IUDs including Mirena®, Skyla®, Kyleena®, Liletta®, and Paragard® (copper only)
- » IUD placement under sedation for developmentally delayed or physically impaired women and adolescents

To schedule a patient, e-mail us at [womenshealth@uchospitals.edu](mailto:womenshealth@uchospitals.edu)

or call **773-702-6118**

*Urgent appointments are also available.*

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1. Brant AR, Ye PP, Teng SJ, Lotke PS. Non-contraceptive benefits of hormonal contraception: established benefits and new findings. *Current Obstetrics and Gynecology Reports*. 2017;6(2):109-17.
2. Pocius KD, Bartz DA. Intrauterine contraception: management of side effects and complications. *UpToDate*, Waltham, MA Topic Last Updated August. 2017.
3. Turok DK, Gurtcheff SE, Gibson K, Handley E, Simonsen S, Murphy PA. Operative management of intrauterine device complications: a case series report. *Contraception*. 2010;82(4):354-7.
4. Gemmill A, Lindberg LD. Short interpregnancy intervals in the United States. *Obstetrics and Gynecology*. 2013;122(1):64.

5. Conde-Agudelo A, Rosas-Bermúdez A, Kafury-Goeta AC. Birth spacing and risk of adverse perinatal outcomes: a meta-analysis. *Jama*. 2006;295(15):1809-23.
6. Moniz M, Chang T, Heisler M, Dalton VK. Immediate postpartum long acting reversible contraception: the time is now. *Contraception*. 2017;95(4):335.
7. Ott M, Sucato G. Committee on adolescence. Contraception for adolescents. *Pediatrics*. 2014;134(4):e1257-81.
8. Teal SB, Romer SE, Goldthwaite LM, Peters MG, Kaplan DW, Sheeder J. Insertion characteristics of intrauterine devices in adolescents and young women: success, ancillary measures, and complications. *American Journal of Obstetrics and Gynecology*. 2015;213(4):515. e1-. e5.