Long-acting Reversible Contraception

LARC Basics

Liz Romer, FNP- Children's Hospital Colorado
Jane Lose, ANP, CNM- MCPN

LARC SYMPOSIUM

Disclosures

- Jane Lose: Trainer for Merck (Nexplanon®)
- Liz Romer: Trainer for Merck (Nexplanon®)

Objectives

- LARC overview
- Clinical Guidelines- contraindications, side effects and myths
- Counseling Techniques
- Teenagers and LARC

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What is LARC?

Long-acting reversible contraception

Intrauterine Contraception
Contraceptive Implant

Highly effective, easily reversible birth control

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Why LARC?

- ✓ *Extremely effective methods: >99%*
- ✓ *Safe*

  No estrogen, contraindications rare
- ✓ *Highest rates of patient satisfaction*

  (80% LARC vs 50% short acting)
- ✓ *Highest rates of continuation*

  (86% LARC vs. 55% short acting)
- ✓ *3-12 year effectiveness*
- ✓ *Rapid return of fertility*
- ✓ *Cost effective*

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Myths about LARC

- IUDs cannot be used in nulliparous women
- IUDs cause PID
- My partner will feel the strings
- It is extremely painful to have an IUD inserted
- An IUD should not be placed until the patient has a confirmed negative GC/CT result
- A tenaculum does not have to be used to insert an IUD

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Effectiveness rates

- Nexplanon- 99.95%
- Mirena/Liletta- 99.8%
- ParaGard- 99.2%
- Skyla- 99.1%

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The Methods

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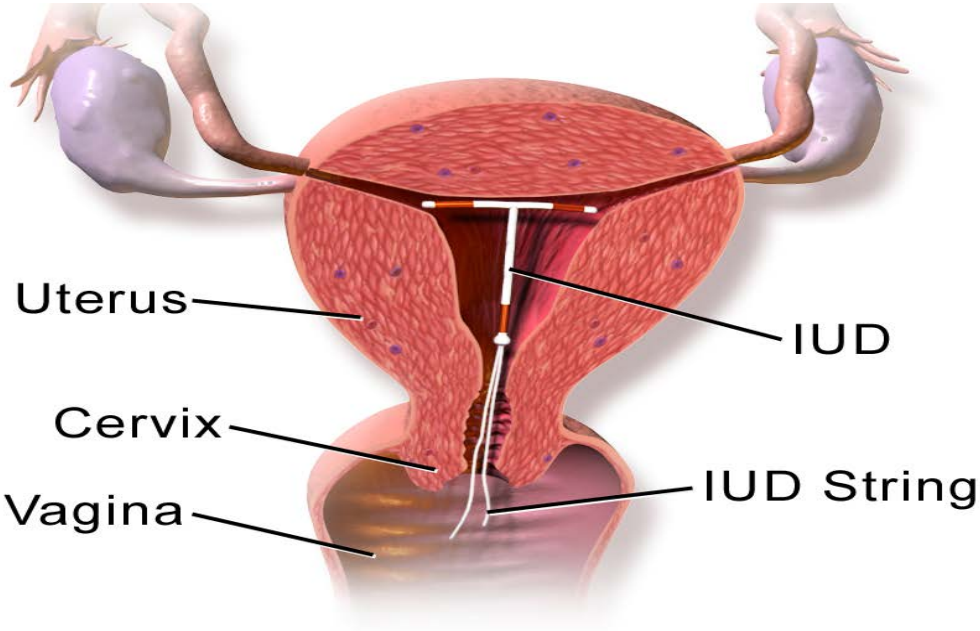
Intrauterine contraception (IUC)



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Which IUC?

Hormonal

- *Irregular bleeding acceptable*
- *Amenorrhea acceptable*
- *History of menorrhagia*
- *History of dysmenorrhea*
- *Adolescent*
- *Breastfeeding*
- *Nulliparous*

Copper T

- *Wants regular periods*
- *Does not want hormones*
- *No menorrhagia history*
- *No dysmenorrhea history*
- *Adolescent*
- *Breastfeeding*
- *Nulliparous*

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Contraindications to IUC use

- ✓*Current pelvic inflammatory disease*
- ✓*Untreated chlamydia, gonorrhea or mucopurulent cervicitis*
- ✓*Known or suspected pregnancy*
- ✓*Uterine malformation*
- ✓*Wilson's disease (ParaGard)*
- ✓*Cervical or uterine cancer*
- ✓*Breast cancer (Mirena only)*
- ✓*Abnormal uterine bleeding, unknown cause*
- ✓*Recent (previous 3 months) postpartum infection*

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How to Be Reasonably Certain That a Woman is Not Pregnant

A health-care provider can be reasonably certain that a woman is not pregnant if she has no symptoms or signs of pregnancy and meets any one of the following criteria:

- is ≤7 days after the start of normal menses
- has not had sexual intercourse since the start of last normal menses
- has been correctly and consistently using a reliable method of contraception
- is ≤7 days after spontaneous or induced abortion
- is within 4 weeks postpartum
- is fully or nearly fully breastfeeding (exclusively breastfeeding or the vast majority [≥85%] of feeds are breastfeeds), amenorrheic, and <6 months postpartum

In situations in which the health-care provider is uncertain whether the woman might be pregnant, the benefits of starting the implant, depot medroxyprogesterone acetate (DMPA), combined hormonal contraceptives and progestin-only pills likely exceed any risk; therefore, starting the method should be considered at any time, with a follow-up pregnancy test in 2-4 weeks. For IUD insertion, in situations in which the health-care provider is not reasonably certain that the woman is not pregnant, the woman should be provided with another contraceptive method to use until the health-care provider can be reasonably certain that she is not pregnant and can insert the IUD.

When to Start Using Specific Contraceptive Methods

Contraceptive method	When to start (if the provider is reasonably certain that the woman is not pregnant)	Additional contraception (i.e., back up) needed	Examinations or tests needed before initiation[1]
Copper-containing IUD	Anytime	Not needed	Bimanual examination and cervical inspection[2]
Levonorgestrel-releasing IUD	Anytime	If >7 days after menses started, use back-up method or abstain for 7 days.	Bimanual examination and cervical inspection[2]
Implant	Anytime	If >5 days after menses started, use back-up method or abstain for 7 days.	None
Injectable	Anytime	If >7 days after menses started, use back-up method or abstain for 7 days.	None
Combined hormonal contraceptive	Anytime	If >5 days after menses started, use back-up method or abstain for 7 days.	Blood pressure measurement
Progestin-only pill	Anytime	If >5 days after menses started, use back-up method or abstain for 2 days.	None

Abbreviations: BMI = body mass index; IUD = intrauterine device; STD = sexually transmitted disease

[1]Weight (BMI) measurement is not needed to determine medical eligibility for any methods of contraception because all methods can be used or generally can be used among obese women. However, measuring weight and calculating BMI at baseline might be helpful for monitoring any changes and counseling women who might be concerned about weight change perceived to be associated with their contraceptive method.

[2]Most women do not require additional STD screening at the time of IUD insertion if they have already been screened according to CDC's STD Treatment Guidelines (available at http://www.cdc.gov/std/treatment). If a woman has not been screened according to guidelines, screening can be performed at the time of IUD insertion and insertion should not be delayed. Women with purulent cervicitis, current chlamydial infection, or gonorrhea should not undergo IUD insertion. Women who have a very high individual likelihood of STD exposure (e.g., those with a currently infected partner) generally should not undergo IUD insertion. For these women, IUD insertion should be delayed until appropriate testing and treatment occurs.

Source: For the full recommendations, see the US Selected Practice Recommendations for Contraceptive Use, 2013 (http://www.cdc.gov/mmwr/pdf/rr/rr6205.pdf).

CDC
Centers for Disease Control and Prevention
National Center for Chronic Disease Prevention and Health Promotion

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Reasonably Certain….

- ≤ 7 days from start of normal period
- Has not had sex since start of last normal menses
- Has been correctly, consistently using a reliable method of birth control
- ≤7 days of spontaneous or induced abortion
- Within 4 weeks postpartum
- Is fully or nearly fully (85% of feeds are breastfeeding), amenorrheic and <6 months postpartum

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Copper Intrauterine Device

ParaGard©

ParaGard®

- Highly effective- >99%
- Easy to insert
- No hormones
- Safe for teens
- Effective for up to 10 years
- Quick return to fertility with removal

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How it works:

- Creates an immune response hostile to sperm
- Copper is toxic to sperm
- Inhibits implantation with inflammatory response in endometrium
- Can be used as emergency contraception

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ParaGard as
emergency contraception

When placed within 5 days of unprotected intercourse, the copper IUD decreases a woman's chance of pregnancy to

1 in 1,000

And then you can leave it place…

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Insertion

- Be reasonably certain patient is not pregnant
- Safe in first 7 day of menses, post-abortion or postpartum, or when changing from a different hormonal method
- Immediately effective

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Hormonal intrauterine contraception

Liletta, Mirena, Skyla

Liletta®

- Highly effective, >99%
- 52mg levonorgestrel
- Easy to insert
- Safe for teens
- Quick return to fertility with removal
- Effective for up to 3 years, likely longer
- 340B pricing- $50

LARC SYMPOSIUM

Mirena®

- Highly effective, >99%
- 52mg levonorgestrel
- Easy to insert
- Safe for teens
- Quick return to fertility with removal
- Effective for up to 5 years
- Indicated for heavy menstrual bleeding

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Mirena®/Liletta®

- 20 mcg levonorgestrel/day
  - Progestin-only method
- 3-5 years use
- Typical bleeding pattern:
  - Light irregular bleeding:
    - 25% at 6 months
    - ~10% at 1 year
  - Amenorrhea:
    - 44% by 6 months
    - 50% by 12 months

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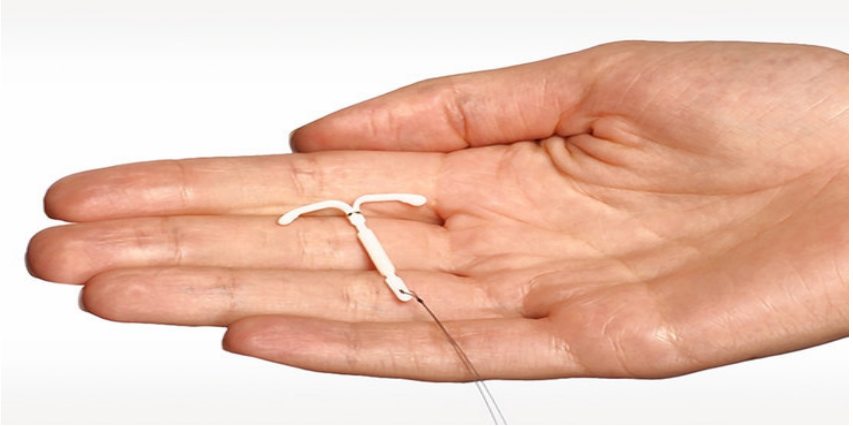
Skyla®

- Highly effective, >99%
- 13.5mg levonogestrel
- Easy to insert
- Safe for teens
- Quick return to fertility with removal
- Effective for up to 3 years
- Smaller than other IUDs, 28mm x 30mm



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Skyla®

- 14 mcg levonorgestrel/day

  Progestin-only method
- 3 years use
- Smaller than Liletta/Mirena

  1.1 x 1.2 in. (vs. 1.3 x 1.3 in)

  Inserter tube 0.15 in. (vs. 0.19 in)
- Increased irregular bleeding compared with Mirena/Liletta
- Amenorrhea at 1yr- only 6%

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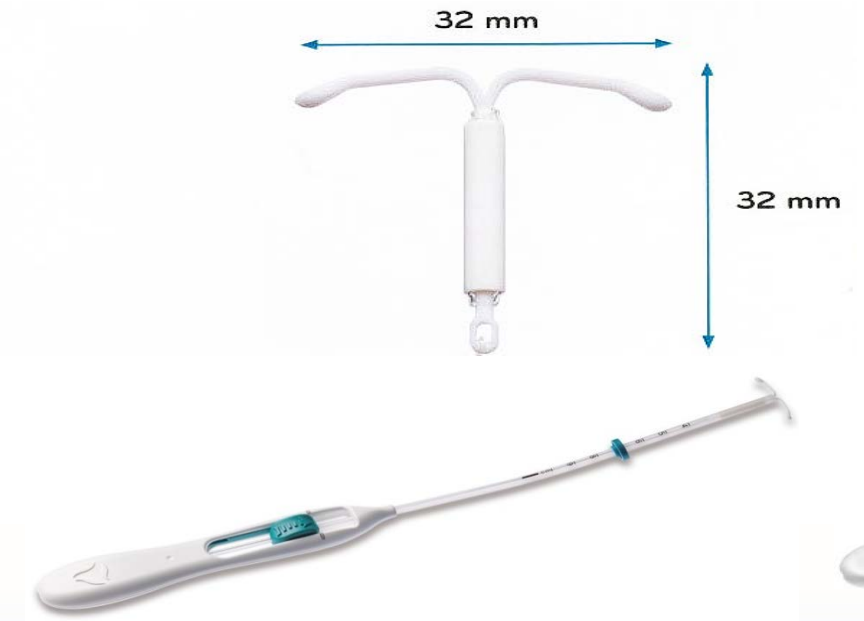
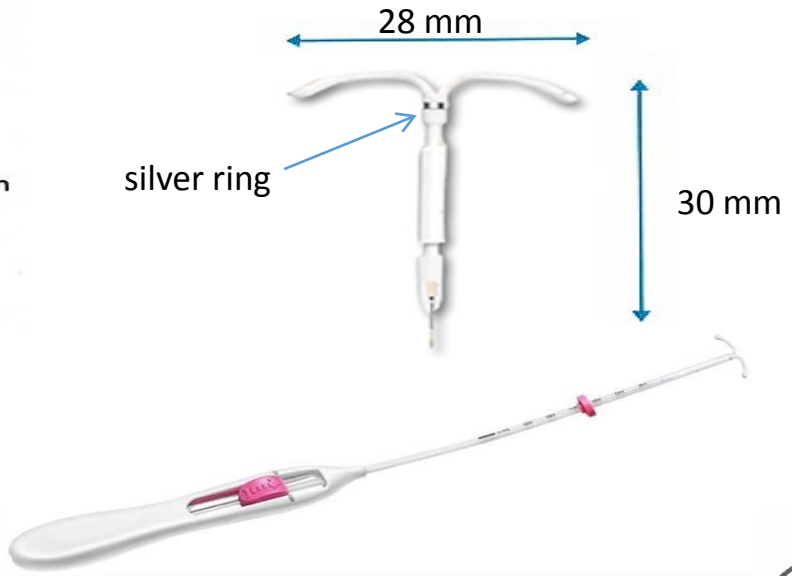
Mirena compared to Skyla





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Hormonal IUCs
How do they work?

Inhibiting Fertilization

- Thickened cervical mucus
- Inhibition of sperm motility and function
- Foreign body reaction induced
- Ovulation inhibited
  (in 5%–15% of cycles)

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Nexplanon®

Etonogestrel Implant

- Highly effective, >99%
- Easy to insert, can “Quick Start”
- Overall decrease in menstrual volume
- Safe for teens
- Quick return to fertility with removal

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How Nexplanon® works:

- Inhibit ovulation
- Thicken cervical mucus to inhibit passage of sperm

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Nexplanon bleeding profile

Frequent or prolonged bleeding is common during first 3-6 months.

Then:

1 out of 5: amenorrhea

1 out of 5: prolonged, frequent bleeding

Only some will have "bothersome" bleeding

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Nexplanon- "bothersome bleeding"

- Counseling and anticipatory guidance is very important!!!
- Avoid interventions until after 3 months post-insertion.
- If bleeding remains bothersome after three months consider:

NSAIDs:

- Oral celecoxib: 200mg daily x 5 days
- Oral mefenamic acid: 500 mg tid x 5 days

Combined hormonal method for three months:

- Monophasic pill continuously x 3 months
- NuvaRing continuously x 3 months

- Still not better?
  - Can offer continuous pills or ring for duration of implant use

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Counseling

The Tiered Approach

Not all methods are created the equal.

Presenting methods relative to their effectiveness and visually can be really helpful to patients.

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Effectiveness of Contraceptive Methods

More Effective

Less than 1 pregnancy per 100 women in a year

Implant — 0.05 %*

Intrauterine Device (IUD) — LNG - 0.2 % Copper T - 0.8 %

Sterilization

Male (Vasectomy) — 0.15 %

Female (Abdominal, Laparoscopic, Hysteroscopic) — 0.5 %

6-12 pregnancies per 100 women in a year

Injectable — 6 %

Pill — 9 %

Patch — 9 %

Ring — 9 %

Diaphragm — 12 %

18 or more pregnancies per 100 women in a year

Male Condom — 18 %

Female Condom — 21 %

Withdrawal — 22 %

Sponge — 24 % parous women, 12 % nulliparous women

Fertility-Awareness Based Methods — 24 %

Spermicide — 28 %

Less Effective

* The percentages indicate the number out of every 100 women who experienced an unintended pregnancy within the first year of typical use of each contraceptive method.

How to make your method most effective

After procedure, little or nothing to do or remember.

Vasectomy and hysteroscopic sterilization: Use another method for first 3 months.

Injectable: Get repeat injections on time.

Pills: Take a pill each day.

Patch, Ring: Keep in place, change on time.

Diaphragm: Use correctly every time you have sex.

Condoms, sponge, withdrawal, spermicides: Use correctly every time you have sex.

Fertility awareness-based methods: Abstain or use condoms on fertile days. Newest methods (Standard Days Method and TwoDay Method) may be the easiest to use and consequently more effective.

CONDOMS SHOULD ALWAYS BE USED TO REDUCE THE RISK OF SEXUALLY TRANSMITTED INFECTIONS.

Other Methods of Contraception

Lactational Amenorrhea Method: LAM is a highly effective, *temporary* method of contraception.

Emergency Contraception: Emergency contraceptive pills or a copper IUD after unprotected intercourse substantially reduces risk of pregnancy.

Adapted from WHO's Family Planning: A Global Handbook for Providers (2001) and Trussell et al (2011).

CS 231556

U.S. Department of Health and Human Services
Centers for Disease Control and Prevention

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HOW WELL DOES BIRTH CONTROL WORK?

What is your chance of getting pregnant?

Really, really well

	The Implant (Nexplanon)	IUD (Skyla)	IUD (Mirena)	IUD (ParaGard)	Sterilization, for men and women
Works, hassle-free, for up to...	3 years	3 years	5 years	12 years	Forever

No hormones

Less than 1 in 100 women

Okay

	The Pill	The Patch	The Ring	The Shot (Depo-Provera)
For it to work best, use it...	Every. Single. Day.	Every week	Every month	Every 3 months

6-9 in 100 women, depending on method

Not so well

	Withdrawal	Diaphragm	Fertility Awareness	Condoms, for men and women

Needed for STI protection

Use with any other method

For each of these methods to work, you or your partner have to use it every single time you have sex.

12-24 in 100 women, depending on method

FYI, without birth control, over 90 in 100 young women get pregnant in a year.

BEDSIDER Bedsider.org

Bixby Center for Global Reproductive Health

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Birth Control Method Effectiveness:

How many women out of 100 get pregnant in 1 year with typical use?

How effective is this method? How likely am I to get pregnant?

- **Most effective:** IUD, Implant, Sterilization *(less than 1 woman)*
- Depo-Provera *(3 women)*
- Pill/Patch/Ring *(8 women)*
- Condom *(15 women)*
- **Least effective:** No contraception *(85 women)*

For more information, please visit www.healthteamworks.org

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Who keeps using what? Continuation Rates at 1 Year

HORMONAL IUD	88%
COPPER IUD	84%
IMPLANT	83%
SHOT	57%
PILLS	55%
RING	54%
PATCH	49%
LONG-ACTING METHODS	86%
NON-LONG-ACTING METHODS	55%

Motivational Interviewing

Stages of Readiness for Change

- Precontemplation–The patient does not believe a problem exists. ("I won't get pregnant!")
- Contemplation—The patient recognizes a problem exists and is considering treatment or behavior change. ("Maybe I could get pregnant and there are things I could do to prevent this.")
- Action—The patient begins treatment or behavior change. ("I'll take that prescription for birth control pills.")
- Maintenance—The patient incorporates new behavior into daily life. ("I'm taking the pill every day.")
- Relapse—The patient returns to the undesired behavior. ("The pill makes me sick, I think I'll stop.")

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OARS model- MI

Open Ended Questions A question that invites a person to think a little before responding.	Where do you see yourself in 5 years? What is you plan for having a family?
Affirming Supporting and encouraging through recognizing the positive things.	You have some great ideas about your future. You have really thought about your choices.
Reflective Listening Clarifying and conveying your understanding of what was said.	It sounds like you really want to go to college. I hear you saying that 3 children is enough for you.
Summarizing Pulling together the things that someone has told you.	I am hearing that you do not want another pregnancy, and that privacy is really important to you… What you have told me so far is….

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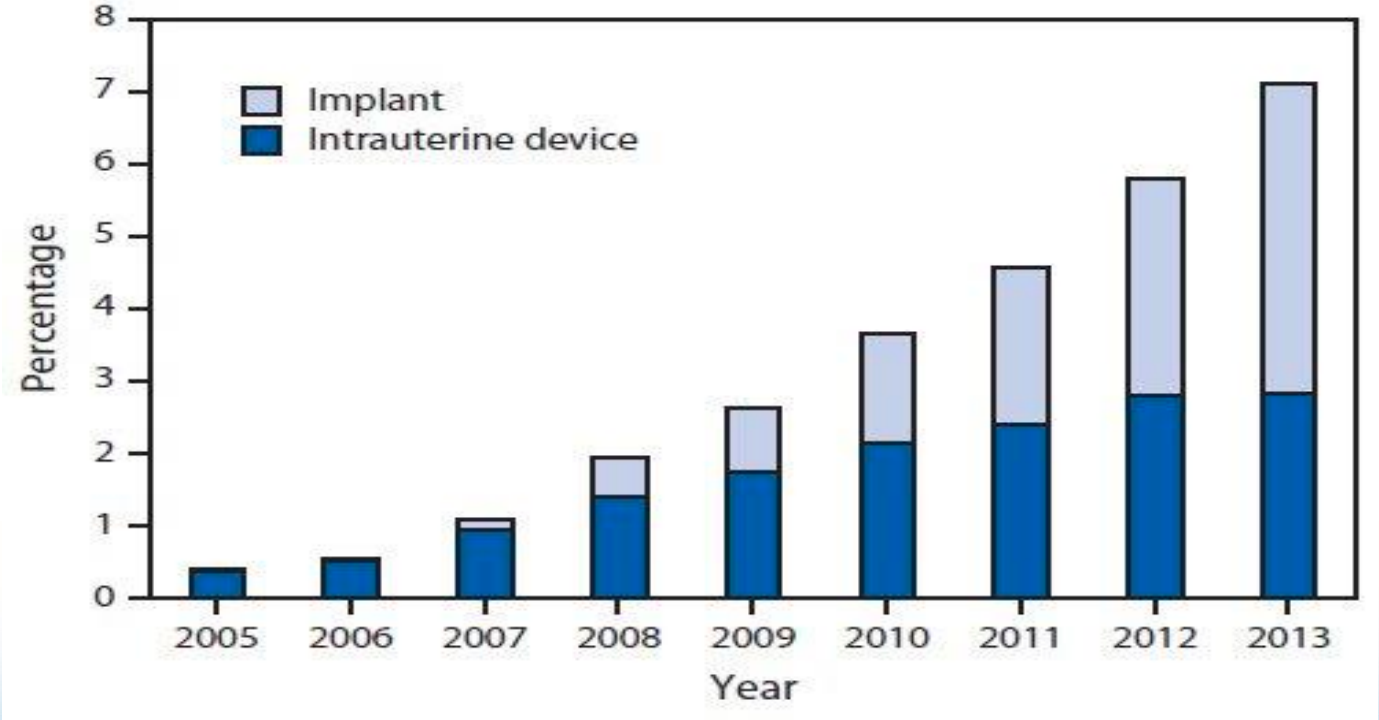
and Teenagers…

LARC
SYMPOSIUM

Percentage of female teens aged 15–19 years using long-acting reversible contraception (LARC) among those seeking contraceptive services at Title X service sites, by LARC type — United States, 2005–2013



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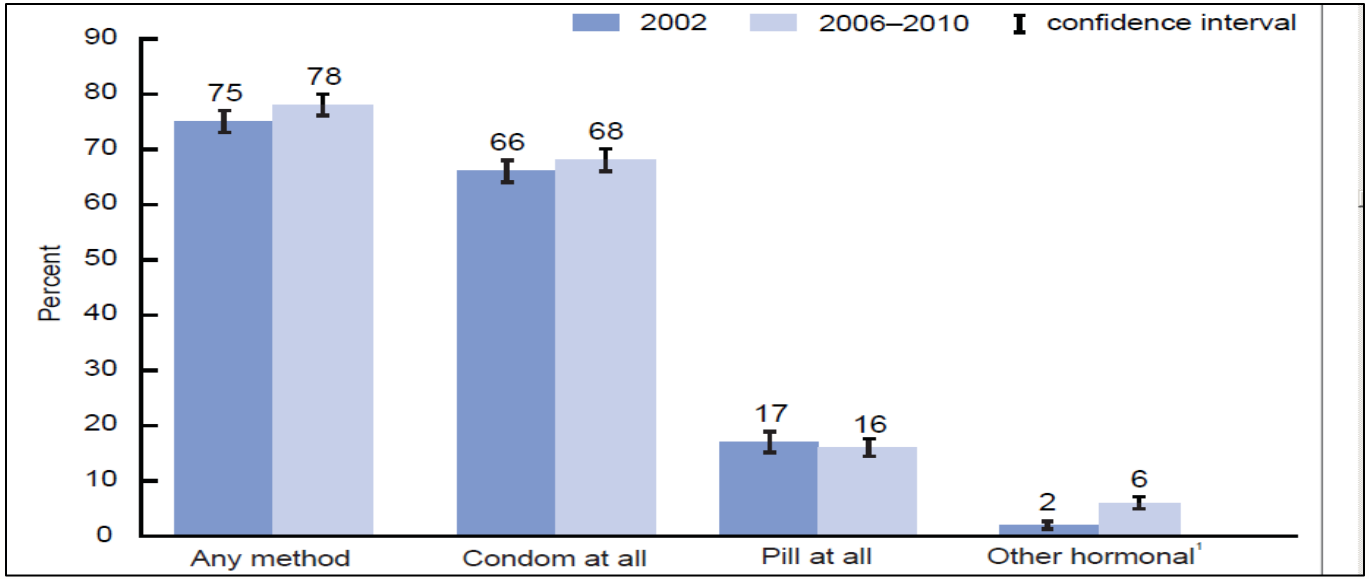
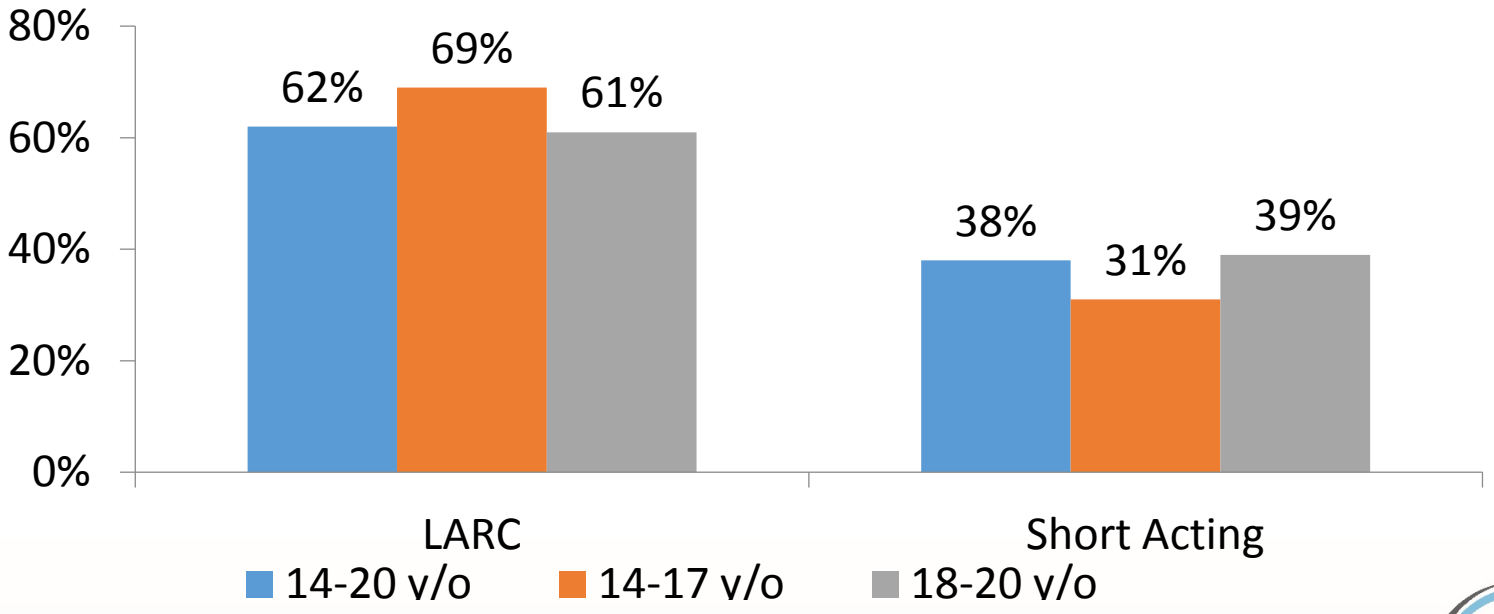
What Birth Control Methods Are Teens Using?



CDC/NCHS. National Survey of Family Growth. 2006-2010.

What Do Teens Choose?



PHYSICIANS FOR REPRODUCTIVE HEALTH

Contraceptive Choice Project: Mestad, R et al. Contraception 84:2011.

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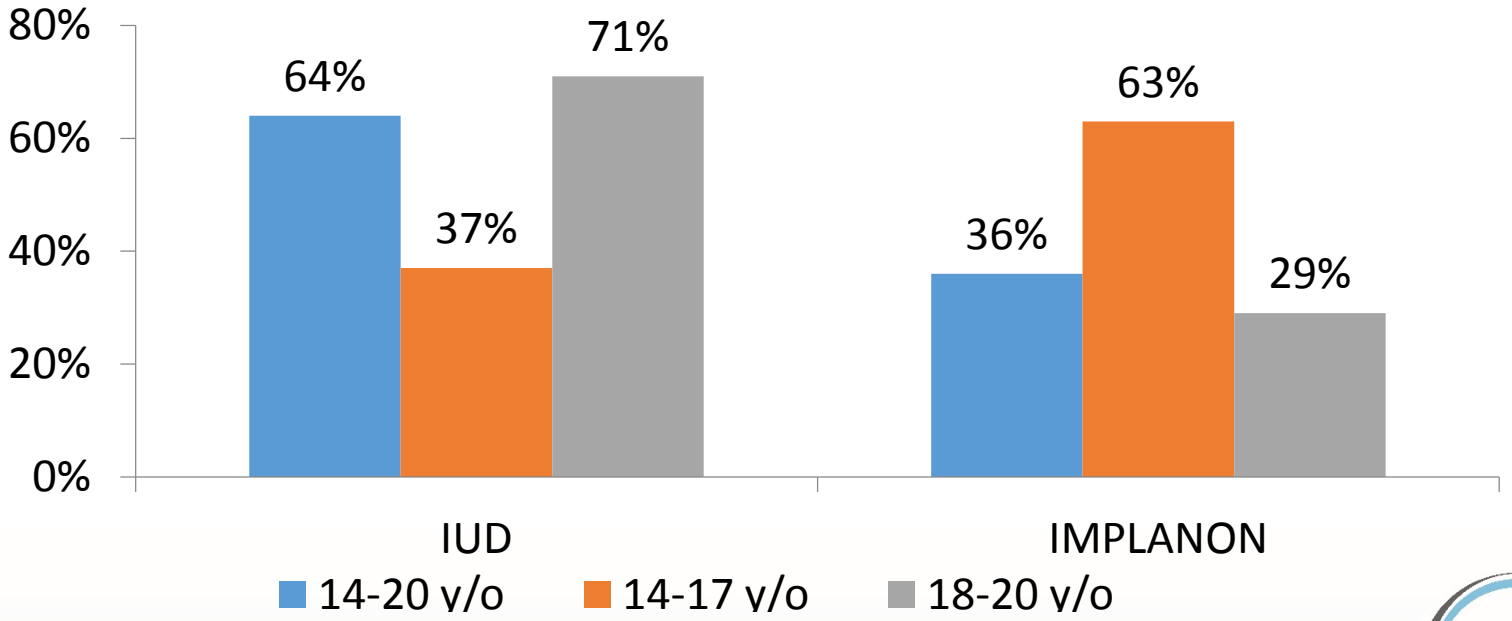
Of Teens Choosing LARC… What Do Teens Choose?



PHYSICIANS FOR REPRODUCTIVE HEALTH

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Adolescence

- The process of cognitive, psychosocial, sexual and moral growth and development that transforms dependent children into independent self-sufficient members of society
  - Goals
    - Build autonomy and independence
    - Establish identify (including sexual)
    - Develop social competence
    - Acquire cognitive abilities

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Confidentiality

- Developmental Need
- Define confidentiality, scope and limitation
- Reassure and discuss at every visit
  - Normalize for both parent and adolescent the need for privacy and talking with adolescent alone.
- If not assured, teens will withhold vital information
- Opportunity to build rapport
- Fits with desire for autonomy and focus on privacy
- State specific laws available at guttmacher.org

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Awareness: Education and Counseling

- Adolescent Focused
  - What teens want from us
    - Autonomy
    - Respect
    - non-judgmental
    - accurate information
    - ***A voice in the decision***

- How we deliver this
- Don't dictate, trust them to make the decision - guide the discussion
  - What do YOU want from birth control?
  - How old do you want to be when you have your first baby?
  - What is the most important thing for YOU about your birth control method?
  - Can you foresee any problems with this method?

Peers are influential and important

Get Real about side effects

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Counseling Adolescents

- Tiered Counseling – most effective to least effective
- What they know and have heard
- What friends and family using
- Use models, props and drawings
- Motivational interviewing (MI)

  "a directive, client-centered counseling style for eliciting behavior change by helping clients explore and resolve ambivalence."

  - Pros and Cons List
    - What can you see that is good about this method? What can you see that is not good about it?
  - 10-point scale
    - importance of "not getting pregnant"
    - confidence "in using a method"

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Motivational Interviewing

- Goal
  - develop discrepancy between goals, values, and future plans and current behavior
  - assist in resolving ambivalence about change

- Strategies
  - open-ended questions
  - affirmations
  - reflections
  - summaries

- Catch them engaging in healthy behaviors
  - opportunity to give affirmation
  - Compliment decision-making

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Resources

- http://www.cdc.gov/reproductivehealth/unintendedpregnancy/usmec.htm
- http://www.cdc.gov/reproductivehealth/UnintendedPregnancy/USSPR.htm
- http://www.healthteamworks.org/guidelines/contraception.html
- www.guttmacher.org
- https://www.colorado.gov/cdphe/categories/services-and-information/health/personal-and-family-health/sexual-health
- https://www.liletta.com/
- http://www.mirena-us.com/index.php
- http://www.skyla-us.com/index.php
- http://hcp.paragard.com/
- http://www.nexplanon.com/en/consumer/
- https://prh.org/teen-reproductive-health/
- https://bedsider.org/
- http://beforeplay.org/birth-control/

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