Ensuring Access to Long Acting Reversible Contraceptives (LARC) for Adolescents
• Policy needs to improve access and utilization
• Special considerations for use in adolescents
• Describe LARC methods
• Provide evidence that LARCS are SAFE
• Highlight adolescents' NEED for LARC methods
Pennsylvania Center of Excellence, University of Pennsylvania

Templeton Foundation

National Institutes of Health

Bayer Healthcare Pharmaceuticals

FUNDING DISCLOSURES
WHAT IS A LARC?

- C - Contraceptive
- R - Reversible
- A - Acting
- L - Long
**Effectiveness of Family Planning Methods**

<table>
<thead>
<tr>
<th>Method</th>
<th>Effectiveness Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male Condom</td>
<td>99%</td>
</tr>
<tr>
<td>Female Condom</td>
<td>90%</td>
</tr>
<tr>
<td>Female Sterilization</td>
<td>99%</td>
</tr>
<tr>
<td>Male Sterilization</td>
<td>99%</td>
</tr>
<tr>
<td>Pill</td>
<td>95%</td>
</tr>
<tr>
<td>Ring</td>
<td>90%</td>
</tr>
<tr>
<td>Injection</td>
<td>99%</td>
</tr>
<tr>
<td>IUD</td>
<td>99%</td>
</tr>
</tbody>
</table>

**Usage Rates**

- 22% use male condoms
- 22% use female condoms
- 18% use female sterilization
- 16% use pills
- 9% use rings
- 9% use injections
- 6% use IUDs
- 6% use injectable contraceptives

**Notes**

- The effectiveness rates are based on data from 100 women who were instructed in non-intrusive methods.
- Always use a condom with each act of contraception.
- Hormonal methods may cause side effects such as bleeding and mood changes.
- Sterilization is a permanent method and should be considered carefully.
- Contraceptive methods are personal and should be chosen based on individual preferences and needs.

**Common Side Effects**

- Nausea
- Headaches
- Mood changes
- Weight gain

**Emergency Contraception**

- Emergency contraception can be used if a method was not used correctly or was failed. It is effective if used within 72 hours of unprotected sex.
ABSTRACT: Long-acting reversible contraception (LARC) devices and contraceptives are at high risk of unintended pregnancy and may benefit from increased access to use and proper use. These contraceptives have the highest rates of continuation and satisfaction of all reversible methods. Peer-reviewed, and based on evidence, LARC methods are popular among adolescents. The LARC methods are safe and appropriate for most women and adolescents. The long-acting reversible contraception (LARC) devices and the contraceptives

Committee on Adolescent Health Care

Number 539 • October 2012

COMMITTEE OPINION

Women's Health Care Providers
Obstetricians and Gynecologists
The American College of

Endorsed by Prominent Medical Organizations
Adolescence is a time of rapid change.

Teen Sexual Activity

% of adolescents who have had sex by each age
Abortion Surveillance System; and Guttmacher Institute. Sources: CDC/NCHS, National Vital Statistics System and National Survey of Family Growth; CDC.

**U.S. Women by Age**

Proportion of Unintended Pregnancies among

![Bar Chart]

**Total**


Proportion of Pregnancies among

![Bar Chart]
When estrogen medically contraindicated

- Dysmenorrhea
- Heavy menstrual flow
- Menstrual problems

Emergency contraception

- Postabortal
- Postpartum
- General population
- Contraception
average of 41.5 per 1,000 teens
- Abortion rate was 9.7 per 1,000 vs national
- average of 158.5 per 1,000
- Pregnancy rate 34.0 per 1,000 vs national

LARC

- Of the 1,404 teen participants 72% choose a
  reproductive age women in St. Louis
- Provided no-cost contraception to
  Funded by anonymous foundation


Do immediate postpartum contraceptive implants make a difference?

Toceo KM, Sheeder JL, Teal SB. Rapid Repeat Pregnancy in Adolescents:

Postpartum IUD

Later if they did not receive an Immediate

Teens 5X more likely to be pregnant again one year

associated with teen births

State saved $42.5 billion in health expenditures

Teen abortion rate fell 35% between 2009 and 2012

low or no cost

Since 2009, Colorado has provided 30,000 LARCS at

Policlub

How Colorado Dropped Teen Birth Rate by 40 Percent in Four Years
Among the 34% of high school students who have been sexually active in the past 3 months, the most common method used last sex was condoms (58.1%). Other methods included pills (7.9%), no method (2.6%), and IUD or implant (7.4%).
Implant is placed subdermally.

- Nexplanon (2006)
- Liletta (2015)
- Skyla (2013)
- Mirena IUS (2000)
- Hormonal
- Paragard (1988)
- Non-Hormonal

Intrauterine Contraception

WHAT ARE LARC METHODS
<table>
<thead>
<tr>
<th>Indication</th>
<th>Nexplanon</th>
<th>Skyla</th>
<th>Mirena</th>
<th>Paragard</th>
</tr>
</thead>
<tbody>
<tr>
<td>(3 years)</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(5-7 years)</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(10-12 years)</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Emergency</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Menorrhagia</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Contraception</td>
<td></td>
<td></td>
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</tr>
</tbody>
</table>

- **Nulliparous Women**
  - sex unprotected (≥72 hours)
  - Contraception

**DEVICE SPECIFIC INDICATIONS**
<table>
<thead>
<tr>
<th>Common Side Effects</th>
<th>Rare Side Effects</th>
<th>Notable Features</th>
<th>FDA Approved</th>
<th>Year Method Was</th>
<th>Failure Rate in Practice</th>
<th>Effective Time</th>
<th>Active Ingredient</th>
</tr>
</thead>
<tbody>
<tr>
<td>Expulsion, infection, perforation, amenorrhea</td>
<td>Expulsion, infection, perforation, hormone effect</td>
<td>Also marketed for treatment of heavy menstrual bleeding</td>
<td>2000</td>
<td>0.2%</td>
<td>Up to five years</td>
<td>Hormonal (levonorgestrel)</td>
<td>Mirena</td>
</tr>
<tr>
<td>Increase menstrual bleeding and cramps</td>
<td>Expulsion, infection, perforation</td>
<td>Marketed as the most effective reversible method that is hormone-free</td>
<td>1984</td>
<td>0.8%</td>
<td>Up to 10 years</td>
<td>Copper-releasing</td>
<td>ParaGard</td>
</tr>
<tr>
<td>Spotting</td>
<td>Expulsion, infection, perforation, hormone effect</td>
<td>Marketed specifically for women who have not given birth</td>
<td>2013</td>
<td>0.2%</td>
<td>Up to three years</td>
<td>Hormonal (levonorgestrel)</td>
<td>Skyla</td>
</tr>
<tr>
<td>Deep placement, infection, duration of irregular bleeding of variable duration</td>
<td></td>
<td>Equipped with a preloaded applicator designed to ease insertion</td>
<td>2011</td>
<td>0.05%</td>
<td>Up to three years</td>
<td>Hormonal (etonogestrel)</td>
<td>Nexplanon</td>
</tr>
</tbody>
</table>
Swellings

Side effects: pain, redness,
rapidly reversible
- Rapid onset of action and
cervical mucus
- Inhibit ovulation and thicken

Mechanism

Duration – 3 year

Medication reservoir

Vinyl-based frame with
Solutions

Issues

- NonOBGNs
- Approval for LARC Services
- Fix discrepancies for reimbursement
- Issues in EOBs
- Fix confidentiality
- Contracts
- Institutional
- Discrepancies in EMR
- Confidentiality in EMR
- Considerations
- Payor

PolicyLab
- Time & complexity of LARC services
- Adolescent services due to increased
  reimbursement for
- Address high rates of service denials
- Fix discrepancies in fee schedules, contracts
- Fix confidentiality issues due to EOBs

- Indications for LARC use
- Improve provider knowledge about
  training in LARC placement
- Access for non-OB/GYN providers to

- Payers
- Health Providers
...and cramps

- Side effects: heavy periods

- Uterus inhospitable environment

- Maturiation reduction spermatogenesis and EE

- Prevent fertilization mechanism

- Approved for up to 10 years
Infection, expulsion, perforation
- Rare: mood change, acne,
cramps, spotting, amenorrhea
- Common: pain with insertion,

Side effects

Environment
- Inhospitable uterus
- Inhibition of sperm action
- Thickened cervical mucus

Mechanism
- side effects
- Location hormones = minimal
- Duration 5-7 years

HORMONAL IUD: MIRENA & LILETTA
Mirena

Failure rate similar to

Mechanism, side effects,

Duration - 3 years

medication reservoir

T-shaped frame with