Trends in Adolescent Contraceptive Use from the Contraceptive CHOICE Project

Gina M. Secura, PhD MPH

Department of Obstetrics & Gynecology
Washington University in St. Louis School of Medicine
Disclaimer

“Educational or instructional materials referenced during presentations at the *Ready, Set, Sustain: Continuing Our Success* conference are for informational purposes only. Presenters' references to these materials do not constitute endorsement by the Office of Adolescent Health or U.S. Department of Health and Human Services. Any statements expressed are those of the presenters and do not necessarily reflect the views of the Department.”
Learning Objectives

• Describe trends in use, continuation, and satisfaction of long-acting reversible contraception (LARC) among CHOICE adolescent participants

• Compare trends in teen pregnancy between CHOICE and national data

• Identify common barriers to LARC provision for adolescents and brainstorm successful strategies
Unintended Pregnancy in U.S.

- Over 3 million unintended pregnancies
  - 59% mistimed
  - 39% unwanted
- 1.2 million abortions
- 367,752 births to teens 15-19 years
- Contraception
  - 52% non-use
  - 43% incorrect use

Finer Contraception 2011; Hamilton NCHS 2012; Frost Guttmacher Inst 2008
Long-acting Reversible Contraception (LARC)

- **LNG-IUS**
  - 99% effective
  - 20 mcg levonorgestrel/day
  - Up to 5 years

- **Copper T IUD**
  - 99% effective
  - Copper ions
  - Up to 10 years

- **Subdermal Implant**
  - 99% effective
  - 60 mcg etonogestrel/day
  - Up to 3 years
LARC Use by Adolescents

• Approximately 4.5% of contracepting adolescents use an intrauterine device (IUD) or Implant
• Recommend as “first-line” by American College of Obstetricians and Gynecologists
• CDC Medical Eligibility criteria
  – Category 2 for IUD
    • Advantages generally outweigh theoretical or proven risks
  – Category 1 for Implant
    • No restriction (method can be used)
Providers Reluctant to Provide IUD to Teens

• Appropriate candidates for IUDs
  – 62% nulliparous
  – 45% STI in past 2 years
  – 37% PID in past 5 years
  – 37% non-monogamous relationship
  – 31% adolescent

• Offer IUD
  – 98% if 35 y.o., married, with 3 children
  – 50% if unmarried 17 y.o., monogamous, and one child
  – 19% if unmarried 17 y.o., never been pregnant
Concerns About Safety

- Survey of 635 office-based physicians & 1,323 Title X providers
  - 30% of respondents said IUDs were very unsafe, unsafe, or were unsure for nulliparous women

- Responses varied by provider type, safety concerns higher among:
  - Office-based family medicine
  - Providers who had not received training
  - Providers who trained more than 25 yrs ago
  - Providers without on-site access to IUDs
The Contraceptive CHOICE Project
The CHOICE Project: Objectives

• To promote LARC (IUDs and implant)
  – Remove financial barriers
  – Increase patient access

• To measure acceptability, satisfaction, side-effects, and rates of continuation across a variety of reversible contraceptive methods, including long-acting reversible methods
The CHOICE Project: Objectives

• To provide enough no-cost contraception to make a population impact on unintended pregnancies:
  – Measures
    • Teen Pregnancy
    • Repeat abortion
The CHOICE Project: Inclusion Criteria

• Study participants 14-45 years
• Residents of Saint Louis City or Country
• Sexually active with male partner or plans to become sexually active
• Does not desire pregnancy during next 12 months
  – Desires reversible contraception
• Willing to start a new contraceptive method
Contraceptive CHOICE Project: Study Details

ELIGIBLE

Tiered Contraceptive Counseling

LNG-IUS
Cu-IUD
Implant
DMPA
Pills
Patch
Ring
Other

Survey
STI screen

Month 0 3 6 9 12 15 18 21 24 27 30 33 36
enrollment

Secura G, Am J Obstet & Gynecol 2010
Madden T, Contraception 2012
Contraceptive Counseling

• Standardized script read to all participants that enrolled at university site regardless of age
  – Included commonly used reversible methods
    • All women heard about all the methods
  – Tiered counseling = start with most effective methods first
  – Evidence-based using CDC medical eligibility criteria
• Provided by trained non-clinicians
• Additional teaching aids used
CHOICE Counseling Room
Contraceptive “Menu of Options”

Which contraceptive method is right for you?

**Hormonal IUD**
It is inserted into the uterus by a health care provider. It can last up to 5 years. You do not need to use before sex. Periods are generally lighter and less painful. It does not provide protection against STD’s.

**Copper IUD**
It is inserted into the uterus by a health care provider and can last up to 12 years. You do not need to use before sex. It does not provide protection against STD’s.

**Implant**
The implant is inserted into your arm by a health care professional, and lasts up to 3 years. Periods are usually lighter and less painful. You do not need to use before intercourse. The implant does not provide protection against STD’s.

**Injections**
Injections (a shot) are given by a health care professional every 3 months. Periods are generally lighter and less painful. You do not need to use before sex. Injections do not provide protection against STD’s.

**Pills (Oral Contraceptives)**
The pill must be taken at approximately the same time every day. You do not need to use before sex. Periods may become lighter and less painful. Oral Contraceptives do not provide protection against STD’s.

**Patch**
The patch is applied to the skin 1 time per week for 3 weeks, then it is removed for 1 week allowing for a period. Periods are generally lighter and less painful. The patch will provide protection against STD’s.

**Vaginal Ring**
The vaginal ring is inserted into the vagina and lasts for 3 weeks. After that it is removed for 1 week allowing for a period. Periods are generally lighter and less painful. The vaginal ring does not provide protection against STD’s.

**Condoms**
The male condom is applied onto the penis just before sex. It must be used before every sexual encounter to provide protection against pregnancy and STD’s.

**Emergency Contraception**
Emergency contraception can help prevent pregnancy after unprotected sex or contraceptive failure. It comes in the form of a pill or the copper IUD. The pill can be taken up to 5 days after unprotected sex and the copper IUD can be placed up to 5 days after unprotected sex. It does not replace the consistent use of contraception. It does not provide protection against STD’s.
Baseline Characteristics: 1,404 Teens

<table>
<thead>
<tr>
<th>Enrollment Clinic</th>
<th>n</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>University</td>
<td>909</td>
<td>64.7</td>
</tr>
<tr>
<td>Community &amp; The SPOT</td>
<td>290</td>
<td>20.6</td>
</tr>
<tr>
<td>Abortion</td>
<td>205</td>
<td>14.6</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Age</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>14 to 17 years</td>
<td>484</td>
<td>34.5</td>
</tr>
<tr>
<td>18 to 19 years</td>
<td>920</td>
<td>65.5</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Race</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Black</td>
<td>877</td>
<td>62.5</td>
</tr>
<tr>
<td>White</td>
<td>416</td>
<td>29.6</td>
</tr>
<tr>
<td>Other</td>
<td>111</td>
<td>7.9</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Ethnicity</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Hispanic</td>
<td>73</td>
<td>5.2</td>
</tr>
</tbody>
</table>
# Baseline Characteristics: 1,404 Teens

<table>
<thead>
<tr>
<th>Insurance</th>
<th>n</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>None</td>
<td>392</td>
<td>28.8</td>
</tr>
<tr>
<td>Private</td>
<td>583</td>
<td>42.8</td>
</tr>
<tr>
<td>Public</td>
<td>386</td>
<td>28.4</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Mother’s Education</th>
<th>n</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt;= High School</td>
<td>594</td>
<td>42.4</td>
</tr>
<tr>
<td>Some college</td>
<td>433</td>
<td>30.9</td>
</tr>
<tr>
<td>College+</td>
<td>314</td>
<td>22.4</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Sexually Transmitted Infection</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Reported history at enrollment</td>
<td>381</td>
<td>27.1</td>
</tr>
<tr>
<td>Tested positive at enrollment*</td>
<td>117</td>
<td>9.1</td>
</tr>
</tbody>
</table>

*positive for CT, GC or TV

Unpublished data
# Baseline Characteristics: 1,404 Teens

<table>
<thead>
<tr>
<th></th>
<th>Mean</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Age at first sexual intercourse</strong></td>
<td>15 years</td>
<td></td>
</tr>
<tr>
<td><strong>Prior pregnancy</strong></td>
<td>n</td>
<td>%</td>
</tr>
<tr>
<td>Yes</td>
<td>708</td>
<td>50.4</td>
</tr>
<tr>
<td><strong>Parity</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>0</td>
<td>1061</td>
<td>75.6</td>
</tr>
<tr>
<td>1</td>
<td>290</td>
<td>20.7</td>
</tr>
<tr>
<td>2+</td>
<td>53</td>
<td>3.8</td>
</tr>
<tr>
<td><strong>Prior unintended pregnancy</strong></td>
<td>n</td>
<td>%</td>
</tr>
<tr>
<td>Yes</td>
<td>671</td>
<td>47.8</td>
</tr>
<tr>
<td><strong>History of abortion</strong></td>
<td>n</td>
<td>%</td>
</tr>
<tr>
<td>Yes</td>
<td>259</td>
<td>18.5</td>
</tr>
</tbody>
</table>
Contraceptive Method Chosen

Overall Cohort

- LNG-IUS: 46%
- Copper IUD: 7%
- Implant: 17%
- OCP: 9%
- DMPA: 7%
- Ring: 7%
- Other: 2%

Teens Only

- LNG-IUS: 72%
- Copper IUD: 5%
- Implant: 34%
- OCP: 13%
- DMPA: 9%
- Ring: 5%
- Other: 2%

LARC Uptake

- Overall Cohort: 75%
- Teens Only: 72%
Choice of LARC Methods by Teens

Updated data from Mestad Contraception 2011, unpublished data
## 12-Month Continuation: Overall Cohort

<table>
<thead>
<tr>
<th>Method</th>
<th>Continuation Rate (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>LNG-IUS</td>
<td>87.5</td>
</tr>
<tr>
<td>Copper IUD</td>
<td>84.1</td>
</tr>
<tr>
<td>Implant</td>
<td>83.3</td>
</tr>
<tr>
<td>Any LARC</td>
<td>86.2</td>
</tr>
<tr>
<td>DMPA</td>
<td>56.2</td>
</tr>
<tr>
<td>OCPs</td>
<td>55.0</td>
</tr>
<tr>
<td>Ring</td>
<td>54.2</td>
</tr>
<tr>
<td>Patch</td>
<td>49.5</td>
</tr>
<tr>
<td>Non-LARC</td>
<td>54.7</td>
</tr>
</tbody>
</table>
12-month Continuation: By Age

- LNG-IUS
- Copper IUD
- Implant
- DMPA
- OCP
- Ring
- Patch
- Any LARC
- Non-LARC

The chart shows the continuation rates for various contraceptive methods (14-19, 20-25, >25) over a 12-month period. The continuation rates are represented by bars for each age group, with the highest rates typically seen in the 14-19 age group and the lowest in the >25 age group. The Any LARC category shows the highest overall continuation rates.
### 12-Month Satisfaction: Overall Cohort

<table>
<thead>
<tr>
<th>Method</th>
<th>Satisfied* (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>LNG- IUS</td>
<td>85.7</td>
</tr>
<tr>
<td>Copper IUD</td>
<td>80.1</td>
</tr>
<tr>
<td>Implant</td>
<td>78.7</td>
</tr>
<tr>
<td>Any LARC</td>
<td>83.7</td>
</tr>
<tr>
<td>DMPA</td>
<td>54.0</td>
</tr>
<tr>
<td>Pills</td>
<td>53.6</td>
</tr>
<tr>
<td>Ring</td>
<td>52.7</td>
</tr>
<tr>
<td>Patch</td>
<td>44.4</td>
</tr>
<tr>
<td>Non-LARC</td>
<td>52.7</td>
</tr>
</tbody>
</table>

*Very or somewhat satisfied combined
12-Month Satisfaction: 
By Age

<table>
<thead>
<tr>
<th>Method</th>
<th>14-19 years</th>
<th>20+ years</th>
</tr>
</thead>
<tbody>
<tr>
<td>LNG-IUS</td>
<td>77%</td>
<td>84%</td>
</tr>
<tr>
<td>Copper IUD</td>
<td>72%</td>
<td>81%</td>
</tr>
<tr>
<td>Implant</td>
<td>74%</td>
<td>78%</td>
</tr>
<tr>
<td>LARC</td>
<td>75%</td>
<td>82%</td>
</tr>
<tr>
<td>DMPA</td>
<td>43%</td>
<td>52%</td>
</tr>
<tr>
<td>OCP</td>
<td>46%</td>
<td>50%</td>
</tr>
<tr>
<td>Ring</td>
<td>31%</td>
<td>52%</td>
</tr>
<tr>
<td>Patch</td>
<td>35%</td>
<td>38%</td>
</tr>
<tr>
<td>Non-LARC</td>
<td>42%</td>
<td>50%</td>
</tr>
</tbody>
</table>

*Very or somewhat satisfied combined

Rosenstock Obstet Gynecol 2012
Unintended Pregnancy by Contraceptive Method

Participants with Contraceptive Failure (%)

Year

LARC  DMPA  PPR

HR_{adj} = 22.3
95% CI 14.0, 35.4

Winner NEJM 2012
Method Failure by Age

- **LARC, age ≥21**
- **LARC, age <21**
- **PPR, age ≥21**
- **PPR, age <21**

Probability of not having an unintended pregnancy

Week

**Winner NEJM 2012**
## Teen Outcomes: CHOICE Compared to U.S.

<table>
<thead>
<tr>
<th></th>
<th>CHOICE Annual Rate*</th>
<th>2008 U.S. Rate*</th>
<th>Reduction</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pregnancy</td>
<td>29.6</td>
<td>67.8</td>
<td>56%</td>
</tr>
<tr>
<td>Pregnancy among sexually active teens</td>
<td>29.6</td>
<td>158.5</td>
<td>81%</td>
</tr>
<tr>
<td>Birth</td>
<td>16.3</td>
<td>40.2</td>
<td>59%</td>
</tr>
<tr>
<td>Birth (2010)</td>
<td>16.3</td>
<td>34.3</td>
<td>52%</td>
</tr>
<tr>
<td>Abortion</td>
<td>9.1</td>
<td>17.8</td>
<td>49%</td>
</tr>
</tbody>
</table>

*All rates per 1,000 teens 15-19 years

CHOICE Data: Unpublished; U.S. Data: Kost 2012
What if CHOICE Model Was Adopted Nationally Among All Sexually Active Teens?

<table>
<thead>
<tr>
<th>Outcome</th>
<th>Number in 2008</th>
<th>National rate per 1,000 sexually experienced teens</th>
<th>CHOICE rate</th>
<th>Percent reduction</th>
<th>Number prevented</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pregnancy</td>
<td>733,010</td>
<td>158.5</td>
<td>29.6</td>
<td>81</td>
<td>593,738</td>
</tr>
<tr>
<td>Birth</td>
<td>434,758</td>
<td>94.0</td>
<td>16.3</td>
<td>78</td>
<td>360,849</td>
</tr>
<tr>
<td>Abortion</td>
<td>192,090</td>
<td>41.5</td>
<td>9.1</td>
<td>83</td>
<td>149,830</td>
</tr>
</tbody>
</table>

CHOICE Data: Unpublished; U.S. Data: Kost 2012
The Secret: 3 Key Ingredients

• Education regarding all methods, especially LARC
  – Reframe the conversation to start with the most effective methods

• Access to providers who will offer & provide LARC
  – Dispel myths and increase the practice of evidence-based medicine

• Affordable contraception
  – Institute of Medicine recommendation, Affordable Care Act, Medicaid Expansion
Successful Implementation of CHOICE Model

<table>
<thead>
<tr>
<th>Key Element</th>
<th>Barrier</th>
<th>Facilitator</th>
</tr>
</thead>
<tbody>
<tr>
<td>Education</td>
<td>Limited time for contraceptive counseling during appointment</td>
<td>Counseling provided by non-clinician trained in tiered-based counseling</td>
</tr>
<tr>
<td>Access</td>
<td>Outdated myths regarding teens as LARC candidates</td>
<td>Identify local “champion clinician” who is LARC proficient, trusted, and can dispel myths</td>
</tr>
<tr>
<td>Cost</td>
<td>Lack of reimbursement for contraceptive method, insertion &amp; removal</td>
<td>Network with clinics that have identified how best to manage cost issue through effective billing or payer mix</td>
</tr>
<tr>
<td></td>
<td>Up-front cost of stocking LARC methods for same-day insertions</td>
<td>Investigate ways to purchase a few methods that serve as temporary supply</td>
</tr>
</tbody>
</table>
Dissemination Strategies

• Create online Resource Center to disseminate CHOICE materials
  – Contraceptive counseling script, video, and training protocols
  – Triage system to manage and document calls
  – Practical responses to commonly asked questions
  – Tools to create a LARC-friendly clinic and staff

• Provide technical assistance to end users

• Evaluate how CHOICE materials are adopted and adapted for successful use
Examples of Dissemination

Which family planning method is right for you?

<table>
<thead>
<tr>
<th>Method</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Hormonal IUD</strong></td>
<td>It is inserted into the uterus by a health care provider. It can last up to 3 years. You do not need to use it before sex. Periods are generally lighter and less painful. It does not provide protection against STD's.</td>
</tr>
<tr>
<td><strong>Copper IUD</strong></td>
<td>It is inserted into the uterus by a health care provider and can last up to 12 years. You do not need to use it before sex, it does not provide protection against STD's.</td>
</tr>
<tr>
<td><strong>Implant</strong></td>
<td>The implant is inserted into your arm by a health care professional, and lasts up to 3 years. Periods are usually lighter and less painful. You do not need to use before intercourse. The implant does not provide protection against STD's.</td>
</tr>
<tr>
<td><strong>Injections</strong></td>
<td>Injections (a shot) are given by a health care professional every 3 months. Periods are generally lighter and less painful. You do not need to use before sex. Injections do not provide protection against STD's.</td>
</tr>
<tr>
<td><strong>Pills (Oral Contraceptives)</strong></td>
<td>The pill must be taken at approximately the same time every day. You do not need to use before sex. Periods may become lighter and less painful. Oral Contraceptives do not provide protection against STD's.</td>
</tr>
<tr>
<td><strong>Patch</strong></td>
<td>The patch is applied to the skin 1 time per week for 2 weeks, then it is removed for 1 week allowing for a period. Provides are generally lighter and less painful. The patch will not provide protection against STD's.</td>
</tr>
<tr>
<td><strong>Vaginal Ring</strong></td>
<td>The vaginal ring is inserted into the vagina and lasts for 3 weeks. After it is removed for 1 week allowing for a period. Periods are generally lighter and less painful. The vaginal ring does not provide protection against IUD's.</td>
</tr>
<tr>
<td><strong>Condoms</strong></td>
<td>The male condom is applied onto the penis just before sex. It must be used before every sexual encounter to provide protection against pregnancy and STD's.</td>
</tr>
</tbody>
</table>

Emergency Contraception

Emergency contraception can help prevent pregnancy after unprotected sex or contraceptive failure. It comes in the form of a pill or the copper IUD. The pill can be taken up to 5 days after unprotected sex and the copper IUD can be placed up to 5 days after unprotected sex. It does not replace the consistent use of contraception. It does not provide protection against STD's.

For more information about family planning methods or a list of our free health education classes, call (317) 221 - 2317.

Courtesy of Mary Alexander, Healthy Start Indianapolis
LARC FIRST
LONG-ACTING REVERSIBLE CONTRACEPTION

Are you using one of the most effective contraceptive methods?

ASK US FOR MORE INFORMATION
LARC FIRST

Patient choice is our priority

We make sure every woman and teen is aware of all her contraceptive options
Our patients are using the most effective contraception!
Lessons Learned

• LARC methods are highly effective at preventing pregnancy *regardless of age*
• Teens overwhelming choose LARC
• Teens much more likely to still be using LARC at 1 year compared to more commonly used non-LARC methods
• Successfully promote LARC use among teens
  — Education, access, cost, & LARC-friendly clinic
To Learn More Visit

www.choiceproject.wustl.edu

www.facebook.com/choiceproject

www.twitter.com/wustlchoice

www.youtube.com/user/WUSTLChoiceProject
LARC Services for Teens and Young Adults in Publicly Funded Clinics

Lori Frohwirth, Research Associate

Third Annual Teen Pregnancy Prevention Grantee Conference: Ready, Set, Sustain: Continuing Our Success
May 20-22, 2013, National Harbor, MD
Disclaimer

Educational or instructional materials referenced during presentations at the Third Annual Teen Pregnancy Prevention Grantee Conference: Ready, Set, Sustain: Continuing Our Success are for informational purposes only. Presenters' references to these materials do not constitute endorsement by OAH, ACYF, CDC or the U.S. Department of Health and Human Services. Any statements expressed are those of the presenters and do not necessarily reflect the views of the Department.
Unintended pregnancy rates have increased overall

<table>
<thead>
<tr>
<th></th>
<th>2001</th>
<th>2006</th>
</tr>
</thead>
<tbody>
<tr>
<td>% of pregnancies unintended</td>
<td>48%</td>
<td>49%</td>
</tr>
<tr>
<td>15-19</td>
<td>82%</td>
<td>82%</td>
</tr>
<tr>
<td>20-24</td>
<td>59%</td>
<td>64%</td>
</tr>
<tr>
<td>Unintended pregnancy rate</td>
<td>50</td>
<td>52</td>
</tr>
<tr>
<td>15-19</td>
<td>67</td>
<td>60</td>
</tr>
<tr>
<td>20-24</td>
<td>101</td>
<td>107</td>
</tr>
</tbody>
</table>
Factors driving (changes in) unintended pregnancy

- Sexual activity
- Fecundity
- Contraceptive use
- Desire for pregnancy
- Population composition
Why focus on LARC methods?

- Persistent high rates of unintended pregnancy
- Evidence that inserting LARC methods post-abortion reduces repeat abortion rates
- Many unintended pregnancies due to user error, not method failure
- Other pros:
  - High efficacy
  - High compliance, continuation rates
  - High satisfaction
  - Few side effects
  - Rapid return to fertility
What *might* be happening as childbearing shifts later?

- **20 years ago**
  -Virgin
  -Condom and pill
  -Childbearing
  -Sterilization and LARC

- **Now**
  -Virgin
  -Condom and pill
  -Childbearing
  -Sterilization and LARC

Sexual activity begins around 15-20 years of age.
What *might* be happening as childbearing shifts later?

20 years ago:
- Virgin
- Condom and pill
- Child-bearing
- Sterilization and LARC

Now:
- Virgin
- Condom and pill
- Child-bearing
- Sterilization and LARC

Sexual activity begins at a younger age now compared to 20 years ago.
Evidence on LARC methods and young women
Professional opinion on IUDs has evolved

• ACOG 1992: IUD “especially suited” for older, parous, monogamous women

• ACOG 2005: IUD “should be considered for all women who seek a reliable, reversible contraceptive”

• ACOG 2007: IUDs “should be considered first-line choices for both nulliparous and parous adolescents”
Clinical Guidelines for IUD Use in Nulliparous Women

- Mirena and Paragard are effective and safe
- IUDs have comparable or higher continuation rates compared to other methods
- IUDs do not increase risk of PID or infertility. Mirena may reduce risk
- Due to expulsion rates and bleeding profile, Mirena may be better tolerated than Paragard
- Insertion of an IUD may be more challenging in nulliparous women
Since 2002, LARC use has increased within all age groups.
But LARC methods are still unpopular among adolescent and young adult contraceptors.
Women who have had 1 or 2 births are most likely group to use LARC
Goal of Guttmacher study

- To what extent is the provision of LARC methods integrated into services for adolescents and young adults?
  - Key barriers
  - Effective strategies
Mixed-method Approach

Quantitative component: National survey of clinics

Qualitative component

- Director interviews
- Staff focus groups
- Client interviews
Mixed-method approach

Quantitative component: National survey of clinics

Qualitative component:
- Director interviews
- Staff focus groups
- Client interviews
Mixed-method approach: Quantitative survey of clinics

- Look at outreach efforts and services tailored to adolescents and young adults
- Examine provision of LARC methods
  - Staff knowledge and training
  - Practice and protocols
  - Use, availability and costs
  - Interest in increased access
  - Barriers
Mixed-method approach

Quantitative component: National survey of clinics

Qualitative component

- Director interviews
- Staff focus groups
- Client interviews
Mixed-method approach: Qualitative component

- Identify Title X grantees with high and low LARC utilization among young women
- Grantees helped to identify clinic sites
- Conducted interviews/focus groups with
  - Clinic directors (N = 20)
  - Clinic staff (6 FGDs)
  - Clients (N = 48)
Key issues for directors and clinic staff

- Clinic approaches to reaching/serving adolescents, young adults generally
- Provision of LARC methods:
  - Attitudes
  - Workforce/training issues and needs
  - Counseling practices
  - Perceptions of patient attitudes and knowledge
  - Barriers and opportunities
Key issues for clients

• Clients’ priorities re locating, choosing, and accessing services

• LARC methods:
  – Attitudes
  – Knowledge
  – Experience
  – Interest
  – Concerns
  – Perceived stigma
Results
LARC methods are more commonly provided to young adults than to teens.

To teens:
- Condoms: 13%
- Pills: 43%
- Depo: 25%
- Patch ring: 9%
- IUDs: 3%
- Implants: 4%
- Other: 4%

To young adults:
- Condoms: 11%
- Pills: 44%
- Depo: 20%
- Patch ring: 10%
- IUDs: 8%
- Implants: 4%
- Other: 4%
LARC Use among Younger Patients

- Increases in LARC use among 15-24 yrs
  - IUDs: 47% of facilities
  - Implants: 37% of facilities

- Use of hormonal IUD (64%) more common than copper IUD (16%) among younger patients

- Most sites (74%) purchase LARCs and insert them on site
  - More common at PPs and hospitals, less common at HDs and FQHCs
  - More common at Title X-funded facilities
LARC Counseling

• Regular discussion of LARC methods with younger patients
  – IUDs: 43% discuss with teens, 58% with young adults
  – Implants: 41% discuss with teens, 46% with young adults

• Staff indicate that teens need extra time discussing and support around LARC methods

• Staff counsel teens to manage expectations of LARC with goal of preventing early removal
"It’s the whole thing of knowing what to anticipate... knowing that teenagers have a higher rate of not letting it work and wanting it out... we just want to make sure they’re fully educated, fully aware that, you know the side effects and what could happen... It’s strictly, you know that, counseling and making sure they are aware, we want it to be successful for them and I think for them, to know what to expect, kind of even though it may be different for them and their body, I think that helps them to be successful if they’re ready to anticipate what could happen."

- Director at high LARC utilization site
Staff training on IUDs is low

<table>
<thead>
<tr>
<th></th>
<th>Paragard (%)</th>
<th>Mirena (%)</th>
<th>Implant (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Staff trained</td>
<td>29</td>
<td>43</td>
<td>73</td>
</tr>
<tr>
<td>Staff scheduled for</td>
<td>26</td>
<td>30</td>
<td>71</td>
</tr>
<tr>
<td>training</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

- Training at high LARC utilization sites more often included non-clinical staff

- Training on LARC methods came from several sources
  - Directors at low LARC utilization sites more often only described internal sources of training (in-house, shadowing, etc.)
Knowledge of LARC Methods among Younger Women

- Majority of patients knew about IUDs, more so than implants
- More detailed knowledge expressed among patients at high sites
- Young adults had more knowledge about side effects of LARCs
- Misinformation
  - Confusion about differences between IUD, implant, ring
  - Teens more often talked about IUD moving around
  - Young adults more often talked about health risks of IUDs
“My friend, well a girl I go to school with, was saying that she got [the IUD] and I just, I feel like, I just don’t really like it because anything could go wrong. It might be positioned wrong or during intercourse something could happen and knock it wrong or break it or shove it somewhere it shouldn’t be, so I don’t really like them, I don’t think they’re the safest way to go, it could cause future problems in your uterus and you might not be able to have a proper pregnancy. I just never liked them.”

- Teen patient, high LARC utilization site
Candidacy for LARC Methods: Provider Perspectives

• Most directors and staff identified young women as appropriate candidates for LARCs

• LARCs are particularly useful for certain populations
  – Women who can’t use hormones (copper IUD)
  – College women
  – Women in the military

• Some staff concerns about LARCs among non-monogamous or nulliparous women
  – “And I think [another respondent’s] point is well taken and I will jump out there and say that adolescents have risky behavior and if they are using copper IUDs that don’t thicken the endocervical mucus then maybe there is some worry about upper tract infections and things like that.” - FGD participant, low site
  – “For someone who’s a teen who has never been pregnant, again, I don’t think she would be a good candidate for it.” - FGD participant, high site
Candidacy for LARC Methods: Patient Perspectives

• LARCds work well for young women’s busy lifestyles

• LARCds cover young women through several life milestones (young adults)

• LARCds are ideal because young women forget pills and are irresponsible and lazy
“I think [IUDs and implants] are good for women my age because I think we all have 5000 things on our plate. Women my age are going to grad school and working full time and thinking about starting commitments like buying cars and stuff like that and they’re thinking about all of these big things that the day to day can slip right by. And so things like pills or…any other form of birth control that requires you to have any sort of planning in advance, that’s always inconvenient, so I think we’re just…young and probably stupid most of the time and making decisions on the fly and something like that, where it’s just done taken care of, check that off the list and move on with life, that’s probably good.”

- Young adult patient at low LARC utilization site
# Pros vs. Cons of LARC Methods

<table>
<thead>
<tr>
<th><strong>Pros</strong></th>
<th><strong>Cons</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Discreet</td>
<td>Location of methods</td>
</tr>
<tr>
<td>Effective</td>
<td>Novelty of methods</td>
</tr>
<tr>
<td>Forgettable</td>
<td>Foreign object in body</td>
</tr>
<tr>
<td>Reversible</td>
<td>Lack of STI protection</td>
</tr>
<tr>
<td>Beneficial side effects</td>
<td>Fear of insertion/removal</td>
</tr>
<tr>
<td>Long-lasting</td>
<td>Side effects</td>
</tr>
<tr>
<td>Limited user control</td>
<td>Long-lasting</td>
</tr>
<tr>
<td>Cost effective</td>
<td>Doctor controlled</td>
</tr>
<tr>
<td></td>
<td>Costly</td>
</tr>
<tr>
<td>Pros</td>
<td>Cons</td>
</tr>
<tr>
<td>------------------------------</td>
<td>------------------------------</td>
</tr>
<tr>
<td>• Discreet</td>
<td>• Location of methods</td>
</tr>
<tr>
<td>• Effective</td>
<td>• Novelty of methods</td>
</tr>
<tr>
<td>• Forgettable</td>
<td>• Foreign object in body</td>
</tr>
<tr>
<td>• Reversible</td>
<td>• Lack of STI protection</td>
</tr>
<tr>
<td>• Beneficial side effects</td>
<td>• Fear of insertion/removal</td>
</tr>
<tr>
<td>• Long-lasting</td>
<td>• Side effects</td>
</tr>
<tr>
<td>• Limited user control</td>
<td>• Long-lasting</td>
</tr>
<tr>
<td>• Cost effective</td>
<td>• Doctor controlled</td>
</tr>
<tr>
<td></td>
<td>• Costly</td>
</tr>
</tbody>
</table>
Pros vs. Cons of LARC Methods

**Pros**
- Discreet
- Effective
- Forgettable
- Reversible
- **Beneficial side effects**
- Long-lasting
- Limited user control
- Cost effective

**Cons**
- Location of methods
- Novelty of methods
- Foreign object in body
- Lack of STI protection
- Fear of insertion/removal
- **Side effects**
- Long-lasting
- Doctor controlled
- Costly
Staff Concerns about LARCs

- Anatomy of nulliparous women poses difficulties for IUD insertion
- Changes in guidelines means that IUD insertion may be patient’s first gyne experience
- LARC users won’t return to clinic
- Teens are impatient with side effects = discontinuation

“I just wish they were a little bit more open minded and a little bit more patient with possible side effects. I mean you have these young women that will go and chop off their hair and if they don’t like it they’ll think to themselves oh, it will grow back, but with birth control if like two days later they are having bleeding they call right away and they are like I want this taken out right now.”

- FGD participant, low site
IUDs vs. Implants - Providers

- Staff leaned towards Implants over IUDs for young women
  - Insertion poses less challenges for providers, better tolerated by clients
- Exceptions to this preference were the side effects of Implants (bleeding) as well as patient perception of insertion
IUDs vs. Implants - Patients

• Length of Action
  – "I mean if you're getting in something inserted the one that lasts longer would be more appealing to me."
    – Teen, low site
  – “Three years does not sound as bad as 5, I would probably be willing to try that. [...] Again I don’t know why it’s so shockingly different when it’s essentially the same idea but for whatever reason, 3 more years seems way more reasonable than 5 to me, again because I’m anti committal, shorter time.”
    – Young adult, low site
IUDs vs. Implants - Patients

• Location
  
  – "I think I would rather go for the IUD if I had to choose between the two. […] But it sounds kind of weird being under the skin of your arm […] Just, you think, your uterus, that’s going to prevent pregnancy because it's close to down there. The arm is far away."

    – Young adult, low site

  – “I don’t know if it’s a biased observation of me because I just feel like putting something in your vagina is just weird. I felt like that would just affect children but then maybe under the skin wouldn’t be as damaging maybe."

    – Teen, low site
# Challenges in LARC provision to adolescents and young adults

<table>
<thead>
<tr>
<th>Cost and reimbursement</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>LARCs are too costly</td>
<td>60</td>
</tr>
<tr>
<td>Inadequate LARC reimbursement from private insurance</td>
<td>44</td>
</tr>
<tr>
<td>Inadequate LARC reimbursement from Medicaid</td>
<td>40</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Staff concerns about IUD use in...</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adolescents</td>
<td>47</td>
</tr>
<tr>
<td>Non-monogamous women</td>
<td>44</td>
</tr>
<tr>
<td>Women without children</td>
<td>40</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>More staff training needed</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inserting implants</td>
<td>47</td>
</tr>
<tr>
<td>Inserting IUDs</td>
<td>38</td>
</tr>
<tr>
<td>Inadequate supply of LARCs available</td>
<td>44</td>
</tr>
</tbody>
</table>
Challenges to LARC Provision
Challenges to LARC Provision

Protocols/policies
Challenges to LARC Provision

- Limited time
- Protocols/policies
Challenges to LARC Provision

- Protocols/policies
- Limited time
- Staff resistance
Challenges to LARC Provision

- Limited time
- Staff resistance
- Protocols/policies
- High costs
Challenges to LARC Provision

“So, when I, in this critical time of budget slashing and grants not being funded, if you ask me running this program, I love Depo. We were paying a quarter, a quarter, a vial two years ago for Depo. Now it is up to $2.10. It is still a deal...So that’s my argument on the other side: the IUD costs me a lot more money. If she takes it out in three months, I’m crying. Even if the insurance company is paying for it that is a waste of a lot of money and provider time.”

- Director at high LARC utilization site
Challenges

- Protocols/policies
- Limited time
- Staff resistance
- High costs
Successful Strategies

- Protocols/policies
- Limited time
- Offer free or discounted LARCs
- Staff resistance
Successful Strategies

Protocols/policies

Limited time

Train ALL staff, not just clinical staff

Offer free or discounted LARC

Successful Strategies

Protocols/policies

Limited time

Train ALL staff, not just clinical staff

Offer free or discounted LARC

Successful Strategies

Protocols/policies

Limited time

Train ALL staff, not just clinical staff

Offer free or discounted LARC

Successful Strategies

Protocols/policies

Limited time

Train ALL staff, not just clinical staff

Offer free or discounted LARC
Successful Strategies

- Supplement counseling with other resources for info
- Train ALL staff, not just clinical staff
- Offer free or discounted LARCs
- Protocols/policies
Successful Strategies

- Increase awareness of guidelines for LARC provision
- Supplement counseling with other resources for info
- Offer free or discounted LARCs
- Train ALL staff, not just clinical staff
Summary

- The majority of providers recognize the potential of LARC methods for young women.
- Facility-related barriers around costs and logistics of providing LARCs are most common.
This work is supported by the Office of Population Affairs and the Centers for Disease Control and Prevention

Thank you

www.guttmacher.org