

The Contraceptive CHOICE Project

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Call from Anonymous Foundation

- Remove financial barriers to most effective long-term reversible methods
 - IUDs
 - Implanon
- Provide free contraception for enough women in St. Louis Region to make a population impact:
 - Teen Pregnancy
 - Repeat Abortion Procedures



CHOICE: Primary Objectives

- To increase the acceptance and use of long-term reversible contraceptive (LARC) methods among women of childbearing age
- To measure acceptability, satisfaction, side-effects, and rates of continuation across a variety of contraceptive methods, including long-term reversible methods

CHOICE: Hypotheses

- Increase rates of IUD use in sentinel clinics in STL region:
 - From <1-2% TO
 - 6% or more
- Rates of post-abortion IUD use will increase from <1% to 10% or more
- Use of subdermal implants will increase to 3% or more

CHOICE: Hypotheses

- Continuation rates at 12-months will be greater for IUD and implant vs. other forms of contraception
- Population-Based Outcomes:
 - By end of study
 - Teen pregnancy rates in STL region will decline by 10%
 - Repeat abortion procedures will decline by 10%

Contraceptive Cohort Study

- Recruit 10,000 participants over 4 years
- Remove cost barriers to long-term methods
 - Copper IUD (ParaGard):
 - 10 years duration
 - LNG IUD (Mirena):
 - 5 years duration
 - Implant (Implanon):
 - 3 years duration
- Participant choice
 - 2-3 years follow-up

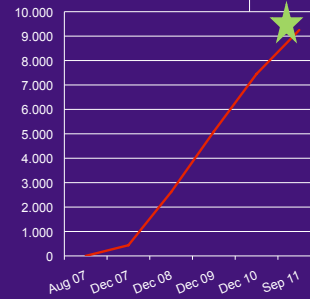


CHOICE: Inclusion Criteria

- 14-45 years
- Primary residency in STL City or Country
- Sexually active with male partner (or soon to be)
- Does not desire pregnancy during next 12 months
 - Desires reversible contraception
- Willing to try a new contraceptive method

Study Recruitment

Location	9,256
2 Abortion clinics	17%
8 Community clinics	14%
University-based research clinic	69%
• Word-of-mouth	
• Provider referrals	



CHOICE Recruitment

- Began August 2007
- Completed recruitment of 9,256 women
 - September 2011
- Phone follow-up rates:
 - 98% at 6 months
 - 95% at 12 months
 - 88% at 24 months
 - > 80% at 36 months



9,256 Women: Baseline

Age (years)	n	%
14-17	485	5.2
18-20	1548	16.7
21-25	3559	38.5
26-35	3029	32.7
36-45	635	6.9

} 2,033

Race	n	%
Black	4660	50.6
White	3861	41.9
Other	693	7.5

9,256 Women: Baseline

SES	n	%
Public assistance	3442	37.2
Trouble meeting basic needs	3639	39.3

Insurance	n	%
None	3782	41.1
Private	3957	43.1
Public	1455	15.8

9,256 Women: Baseline

Parity	n	%
0	4375	47.3
1-2	3885	50.0
3+	996	10.7

Unintended pregnancy	n	%
Total sample	5857	63.2

History of abortion	n	%
Total sample	3873	41.8

History of STI	n	%
Total sample	3746	40.5

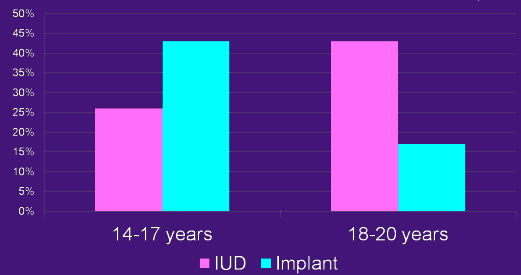
Increase LARC Acceptance

	%
LNG-IUS	46.0
CuT380A	11.9
Implant	16.9
DMPA	6.9
Pills	9.4
Ring	7.0
Patch	1.8
Other	<1.0

} 74.8%



Choice of LARC Methods in Adolescents



Evaluation of CHOICE

- Outcomes
 - Short term:
 - Continuation & satisfaction
 - Long-term
 - Population-based outcomes
 - Unplanned pregnancies:
 - Repeat Abortions
 - Teen births

Continuation

Method	Starting Total	Using at 12 Months	Continuation Rate (%)
LNG-IUS	1,890	1654	87.5
Cu-IUD	434	365	84.1
Implant	522	435	83.3
Any LARC	2,846	2453	86.2
DMPA	313	176	56.2
Pills	478	263	55.0
Patch	99	49	49.5
Ring	431	234	54.2
Non-LARC	1321	723	54.7

Obstet Gynecol 2011; 117:1105-13.

Continuation & Satisfaction at 12 months (OCPs as referent group)

Method	Continuation RR*	95% CI (Continuation)	Satisfaction RR*
LNG-IUS	1.24	1.17, 1.33	1.25
Cu-IUD	1.19	1.10, 1.29	1.18
Implant	1.16	1.07, 1.25	1.12
DMPA	0.99	0.89, 1.10	0.96
Pills	1.0	referent	1.0
Patch	0.76	0.61, 0.94	0.75
Ring	0.95	0.86, 1.04	0.95

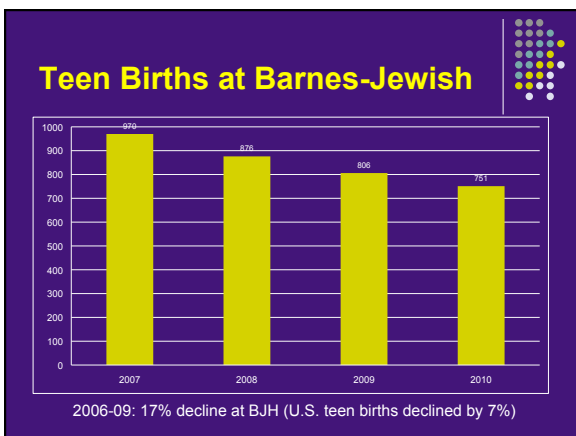
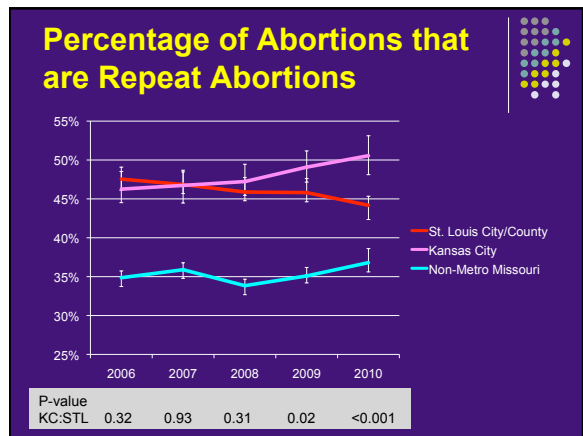
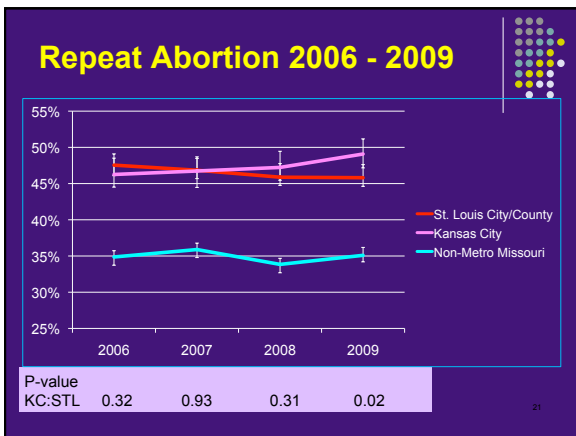
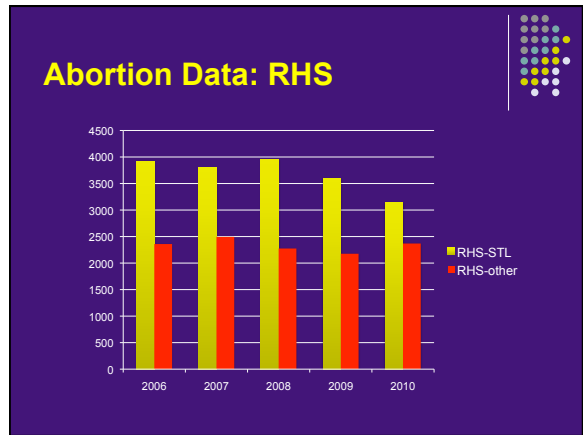
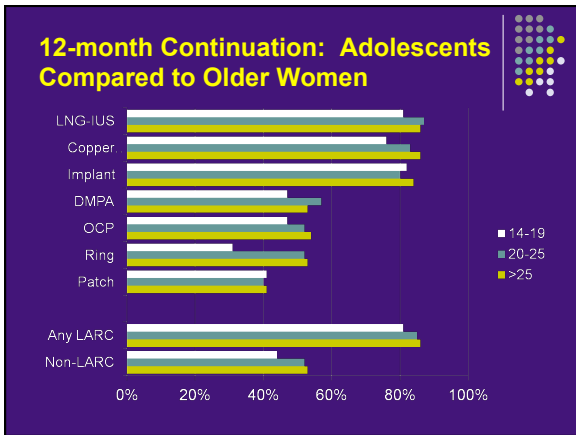
- No evidence that age, education, income, BMI, gravidity, parity, history of unintended pregnancy or AB are confounders.

Obstet Gynecol 2011; 117:1105-13.

IUD Use for Adolescents

- Continuation & satisfaction did NOT differ by age group.
- Appropriate for properly selected and counseled adolescents
- Encourage consistent and correct use of condoms

Tomas A, et al. J Pediatr Adolesc Gynecol. 2006



Abortion & Unintended Pregnancy Rates in CHOICE

- Abortion Rate (women ages 15-44)
 - 4.4 – 7.5 per 1000 women-years
 - Compared to the national rate of 19.6 per 1000
- Unintended pregnancy rate
 - 35.0 per 1,000 women (95% CI: 32.7-38.2)
 - Compared to 52.0 per 1,000 nationally

Peipert J, et al. Obstet Gynecol 2012; 120(6):1291-7.

NEJM CHOICE Publication

THE NEW ENGLAND JOURNAL of MEDICINE

ORIGINAL ARTICLE

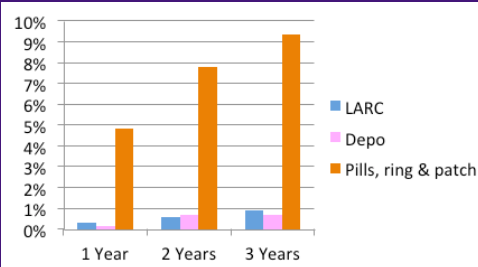
Effectiveness of Long-Acting Reversible Contraception

Brooke Winner, M.D., Jeffrey F. Peipert, M.D., Ph.D., Qihong Zhao, M.S., Christina Buckel, M.S.W., Tessa Madden, M.D., M.P.H., Jenifer E. Allsworth, Ph.D., and Gina M. Secura, Ph.D., M.P.H.

Unintended Pregnancy Rates in CHOICE Cohort

- August 2007 through July 2011
- 615 reported pregnancies
 - 459 (75%) unintended
 - 334 contraceptive failures

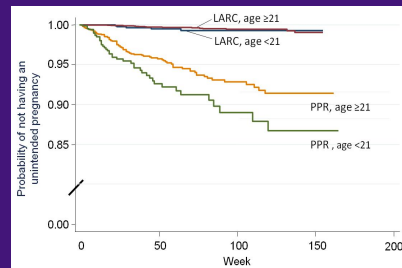
Unintended Pregnancy by Contraceptive Method



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

Winner, et al. NEJM 2012 (in press)

Method Failure by Age



$HR_{adj} = 1.9$; 95% CI 1.2, 2.8

Winner NEJM 2012

Patient Correspondence

"I wanted to take a quick moment to recognize and say thank you for such an amazing thing you all are doing.....within the next three years, I calculated to save a total of \$2500 in birth control. This alone amazes me and I feel is such a blessing....I thank YOU ALL from the bottom of my heart for such a wonderful study. Keep up the good work you all provide!"

Choice Participant

