

# Global Trends and Considerations in Contraceptive Implant Scale-Up

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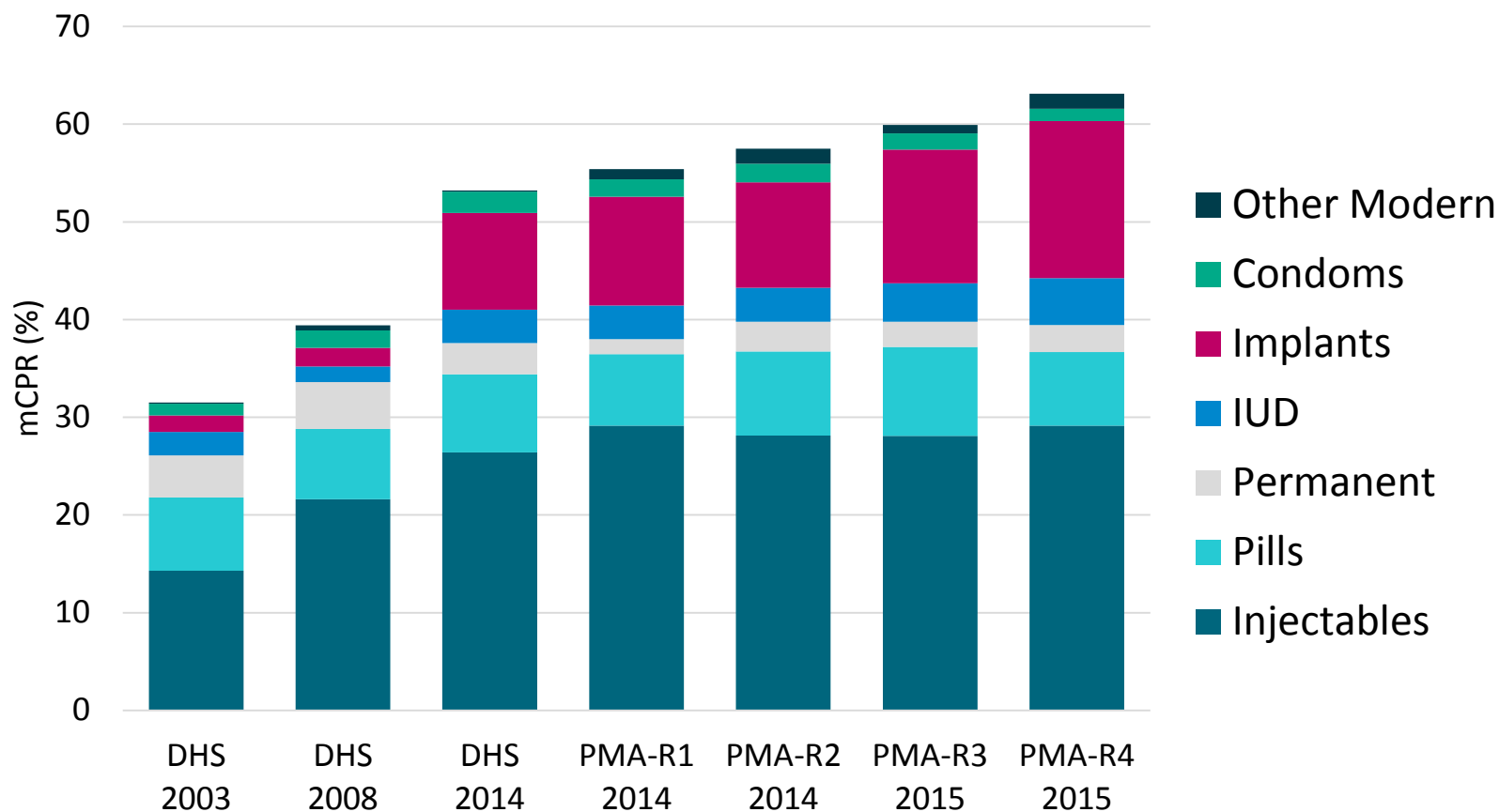
Jhpiego

**Contraceptive  
Implants are  
Accelerating Growth  
in Contraceptive  
Prevalence  
Worldwide**



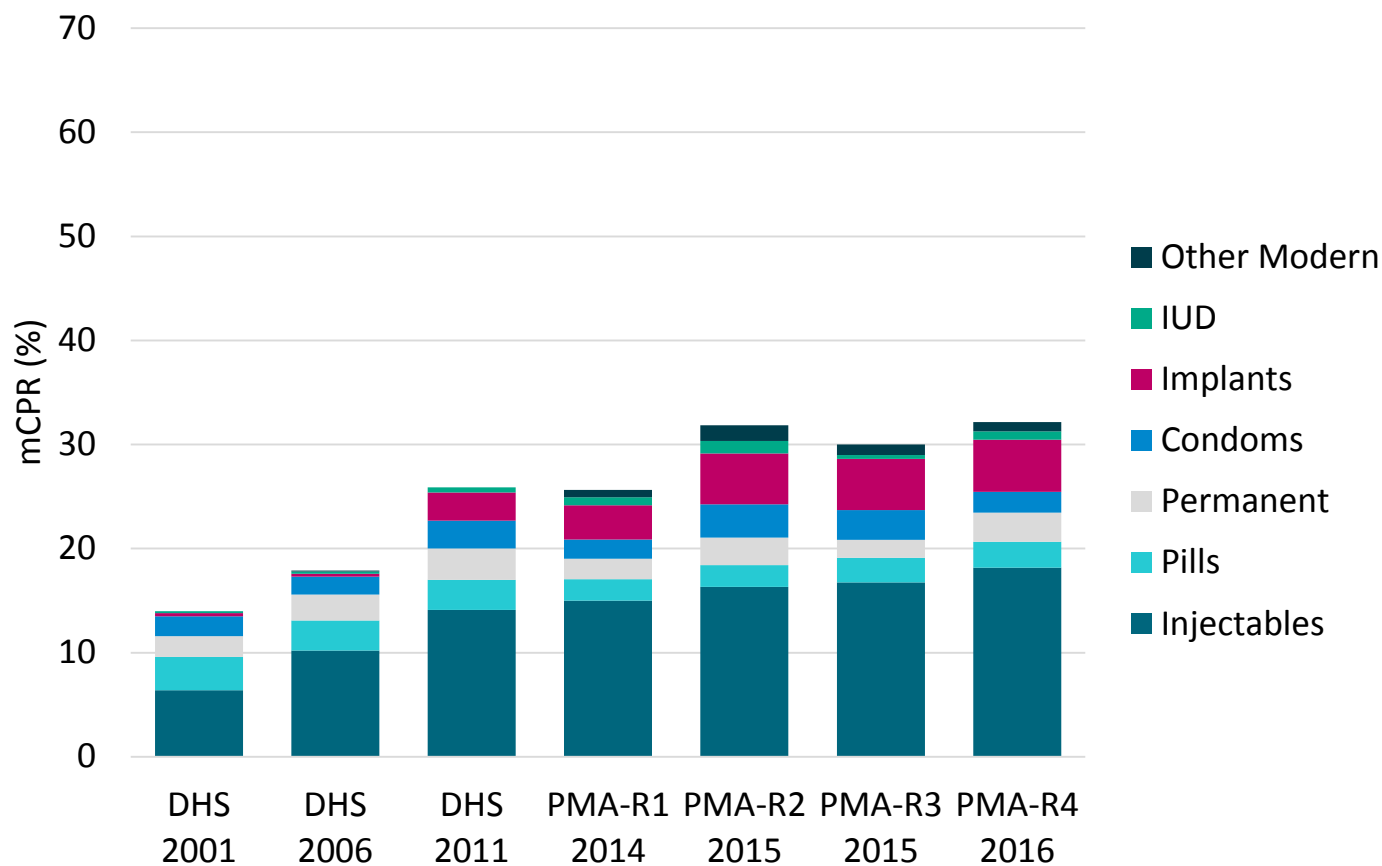
# Kenya mCPR and Method Mix among Married Women, 2003–2015

Source: DHS and PMA2020



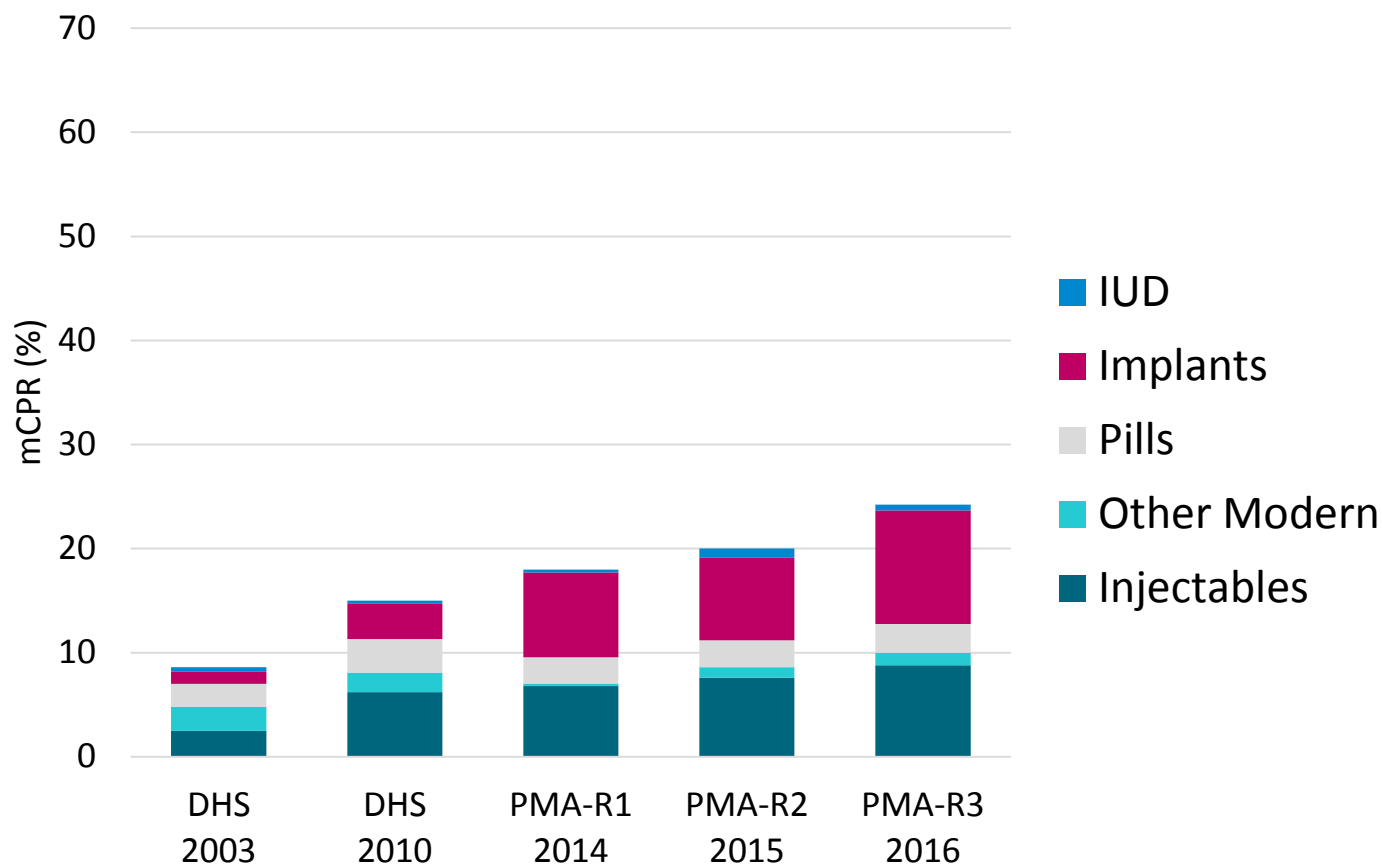
# Uganda mCPR and Method Mix among Married Women, 2001–2016

Source: DHS and PMA2020



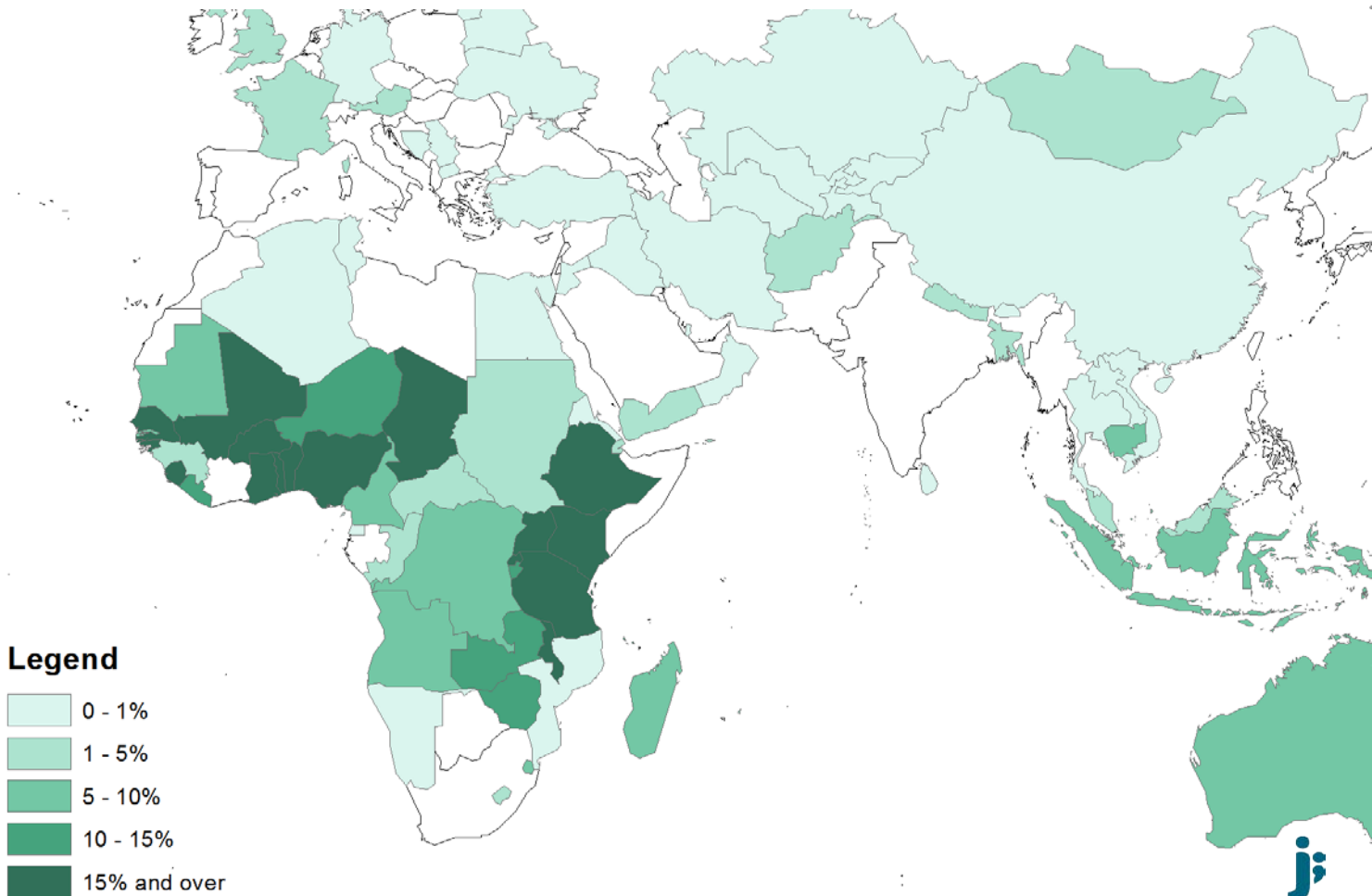
# Burkina Faso mCPR and Method Mix among Married Women, 2003–2016

Source: DHS and PMA2020



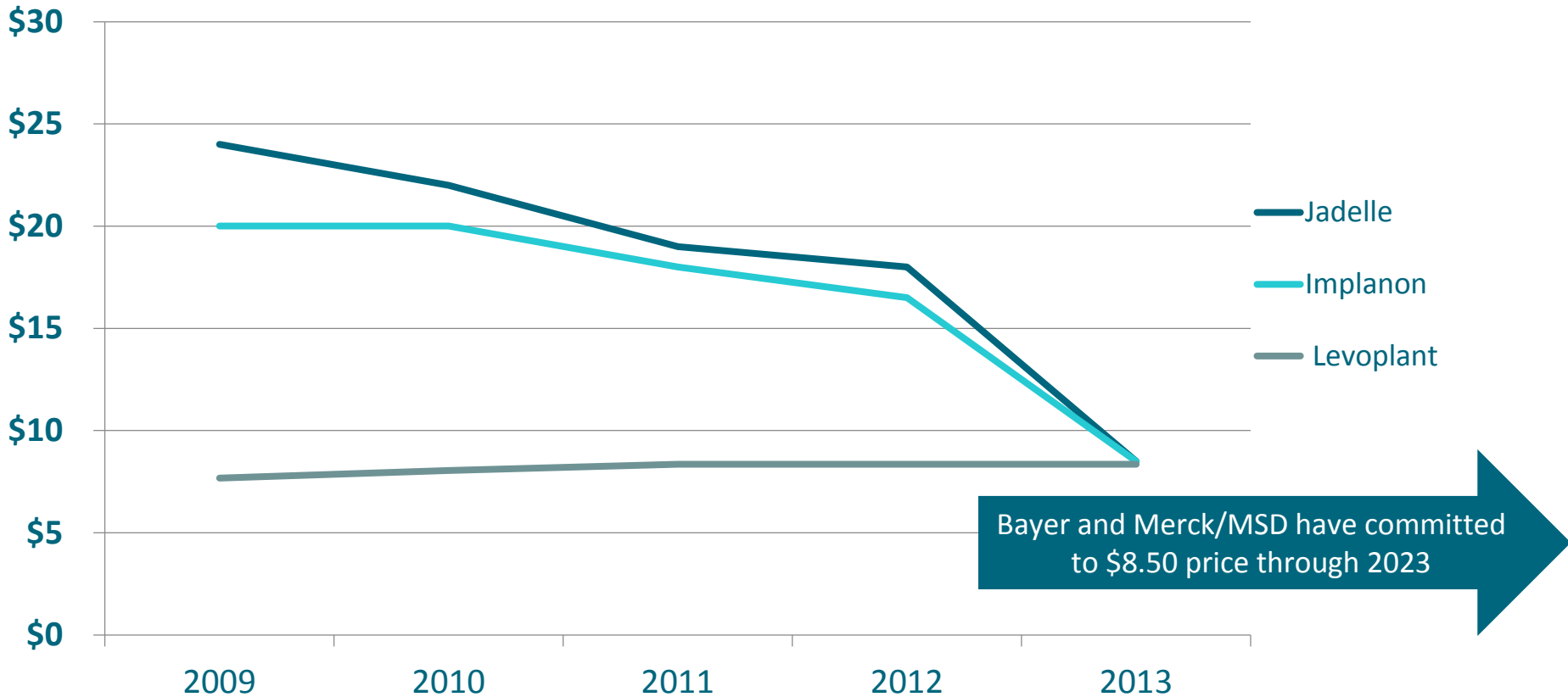
# Where do implants comprise larger proportions of overall contraceptive use?

Source: UN Contraceptive Use, Demographic and Health Surveys



# Contraceptive Implant Prices 2009-2013

Source: RHInterchange and RHSC Press Releases



# How do implant users compare to contraceptive users overall?

Source: PMA2020 Special Surveys in Burkina Faso, Ethiopia, and Kenya

They are on average more married, higher parity, and less educated

	Contraceptive Users Married	Implant Users Married	Contraceptive Users Parity 2+	Implant Users Parity 2+	Contraceptive Users w/No Education	Implant Users w/No Education
<b>Burkina Faso</b>	85%	90%	74%	80%	56%	64%
<b>Ethiopia</b>	9%	10%	75%	74%	42%	48%
<b>Kenya</b>	78%	89%	65%	72%	45%	53%

They receive their method from public health facilities

	Contraceptive Users Receiving Method from Public Facility	Implant Users Receiving Method from Public Facility
<b>Burkina Faso</b>	85%	90%
<b>Ethiopia</b>	9%	10%
<b>Kenya</b>	78%	89%



# Special Considerations for Introducing and Scaling-up Contraceptive Implants



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# Lessons Learned from Implant Programming:

From Jhpiego's experience in the Accelerating Scale-up of Implants Project

- Develop implant introduction and scale-up plans with stakeholders
- National implant programming should factor-in product evolutions
- Consider the needs of implant users not only at initiation, but for follow-up care and removal as well
- Consider the provision of implants outside family planning wards (e.g. community provision, or in maternity settings for postpartum clients)
- Avail necessary equipment and consumables to insert and remove contraceptive implants
- Work with communities and clients to dispel myths and misconceptions

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# Product Evolution

## Implanon NXT

Merck/MSD has developed an improved device for inserting Implanon, and countries around the world are transitioning from the previous version to the newer Implanon NXT.

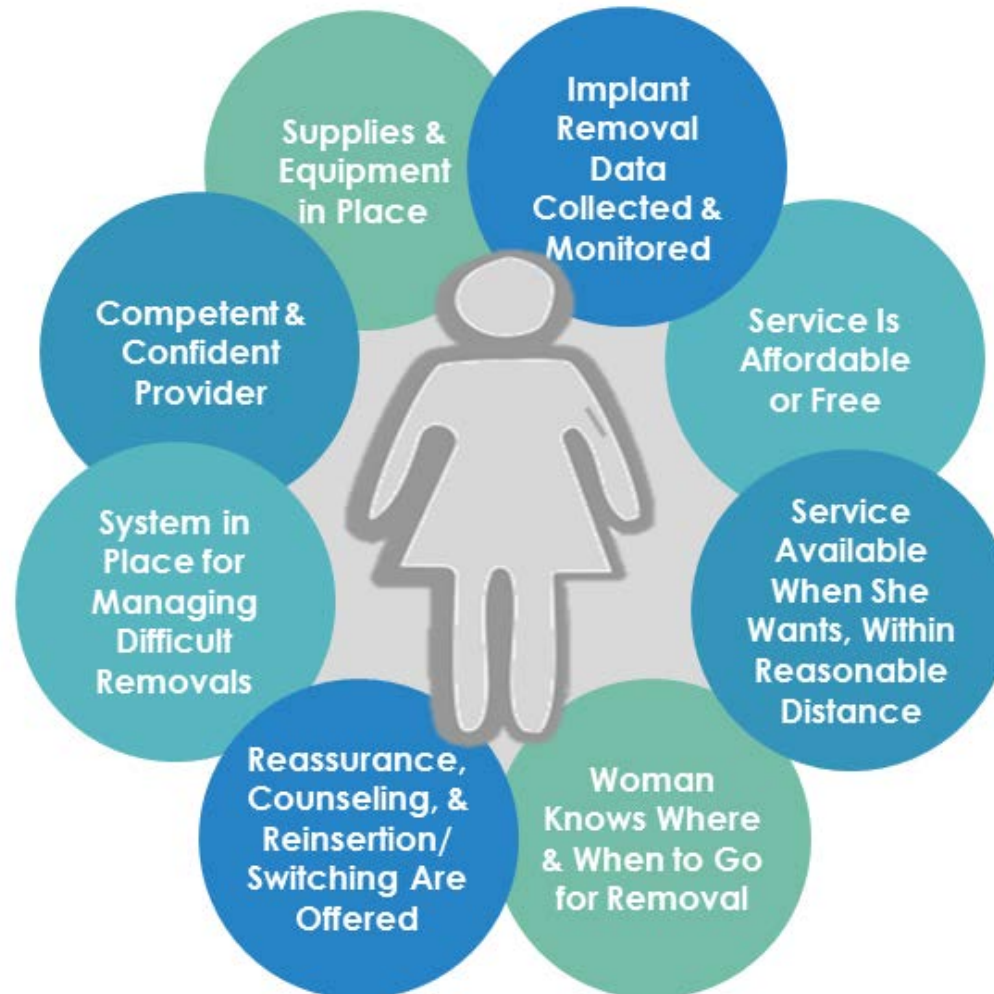
***K4Health Resource: Implanon NXT: On-the-Job Training Course for Current Implant Providers***

## Levoplant

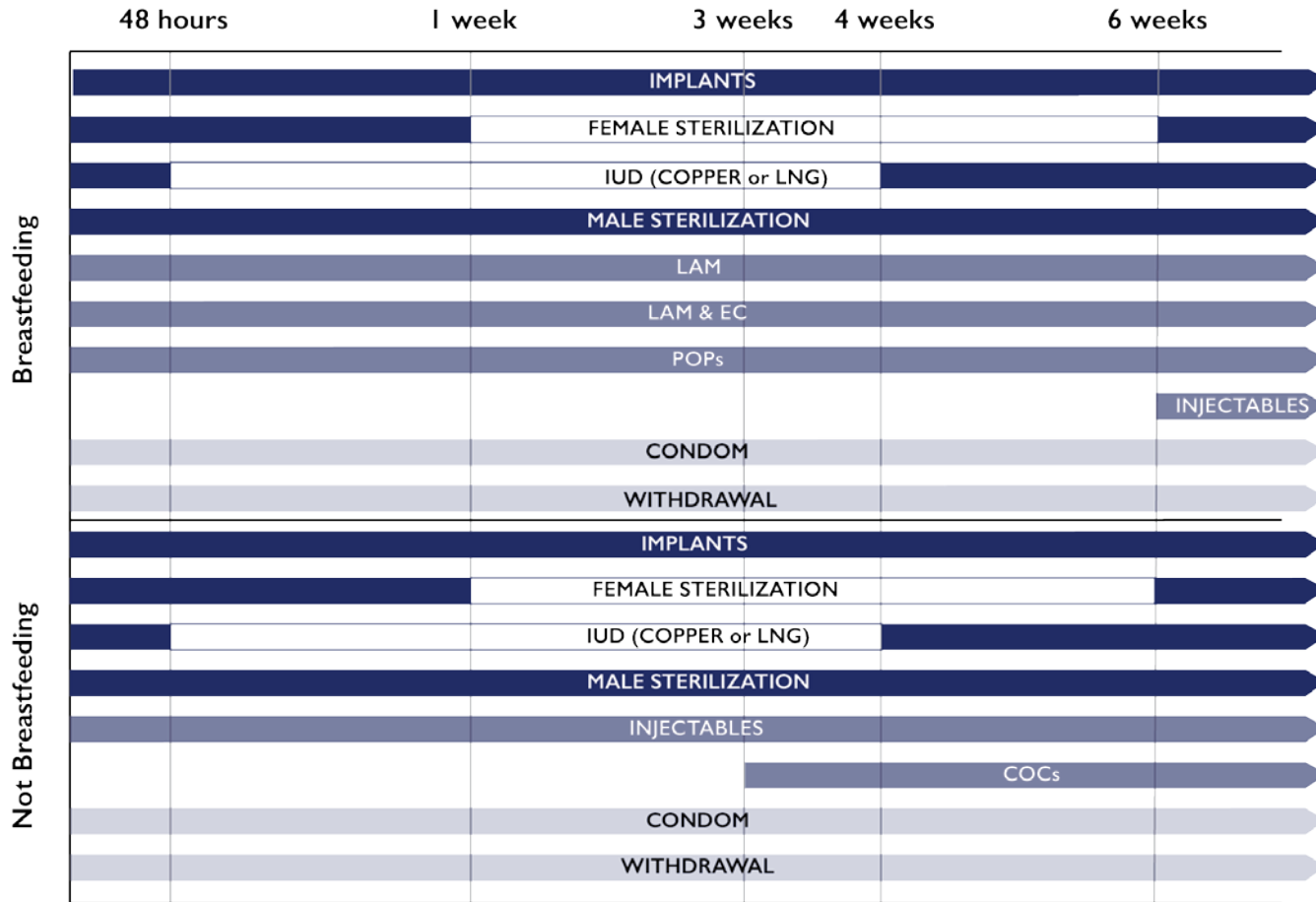
In June 2017, Sino-implant (II) received WHO pre-qualification and updated the global brand name to Levoplant. Now pre-qualified, Levoplant can be procured by most donors and procurers.

***K4Health Resource: Levoplant/Sino-implant (II) Reference Guide for Healthcare Providers & Sino-implant (II)/Levoplant Overview***

# Conditions for Quality Implant Removal Services



# Availing Implants Immediately After Delivery

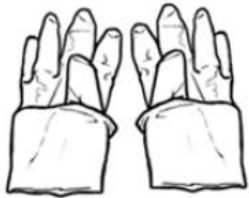


COCs should not be initiated by breastfeeding women until at least 6 months postpartum. In addition, fertility awareness methods, such as Standard Days Method (CycleBeads), require women to chart 4 regular menstrual cycles before beginning this method, so timing varies from one woman to the next.

# Equipment and Consumable Needs for Implants: Insertion and Removal



Antiseptic solution with bowl



Sterile gloves



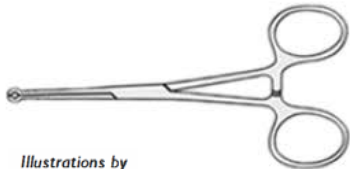
Sterile drape



Sharp dissecting forceps



Local anesthetic (1% concentration with or without epinephrine)



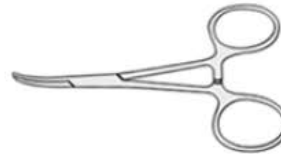
2.2 mm ringed forceps (*modified NSV clamp*)



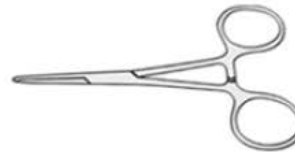
Scalpel



Syringe



Curved mosquito forceps



Straight mosquito forceps



Sterile gauze



Steri-Strips or sterile skin closure



Pressure bandage

Illustrations by  
Erica L. Chin



# On the Horizon



# Possible Duration Changes?

Contraception, Vol.31, No.11 pp.2491-2498, 2016  
Publication on September 26, 2016 doi:10.1093/humrep/dew222

ORIGINAL ARTICLE Fertility control

## Extended use up to 5 years of the etonogestrel-releasing subdermal contraceptive implant: comparison to levonorgestrel-releasing subdermal implant

Moazzam Ali<sup>1,\*</sup>, Aysel Akin<sup>2</sup>, Luis Bahamondes<sup>3</sup>, Vivian Brache<sup>4</sup>,  
Ndemah Habib<sup>1</sup>, Sihem Landoulsi<sup>1</sup>, and David Hubacher<sup>5</sup>; for the  
WHO study group on subdermal contraceptive implants for women

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Submitted on May 7, 2016; resubmitted on July 28, 2016; accepted on August 9, 2016

**STUDY QUESTION:** Is it possible to extend the use of the 3-year one-rod etonogestrel (ENG)-releasing subdermal contraceptive implant to 5 years?

**SUMMARY ANSWER:** The extended use of the one-rod ENG-releasing subdermal contraceptive implant showed similar efficacy to 5 years.

**WHAT IS KNOWN ALREADY:** The initial regulated trials on the ENG-releasing subdermal contraceptive implant showed cumulative 3-year efficacy. The ENG-implant has both well established safety and efficacy data on ENG show high levels at 3 years and some previous clinical research confirms efficacy. However, many women, because the labeled duration has been reached, have the ENG-implant removed before 3 years. This study was an open-label, multi-centre, randomised controlled trial.

## Original Research

GYNECOLOGY

## Prolonged use of the etonogestrel implant and levonorgestrel intrauterine device: 2 years beyond Food and Drug Administration—approved duration

Colleen McNicholas, DO, MSCI; Erin Swor, MD; Leping Wan, MPH; Jeffrey F. Peipert, MD, PhD

**BACKGROUND:** The subdermal contraceptive implant and the 52-mg levonorgestrel intrauterine device are currently Food and Drug Administration approved for 3 and 5 years of use, respectively. Limited available data suggested both of these methods are effective beyond that time. Demonstration of prolonged effectiveness will improve the cost-effectiveness of the device, and potentially patient continuation and satisfaction.

**OBJECTIVE:** We sought to evaluate the effectiveness of the contraceptive implant and the 52-mg hormonal intrauterine device in women using the method for 2 years beyond the current Food and Drug Administration—approved duration.

**STUDY DESIGN:** We initiated this ongoing prospective cohort study in January 2012. We are enrolling women using the contraceptive implant or 52-mg levonorgestrel intrauterine device for a minimum of 3 and 5 years, respectively (started intrauterine device in  $\geq 2007$  or implant in  $\geq 2009$ ). Demographic and reproductive health histories, as well as objective body mass index, were collected. Implant users were offered periodic venipuncture for analysis of serum etonogestrel levels. The primary outcome, unintended pregnancy rate, was calculated per 100 woman-years. We analyzed baseline demographic characteristics using  $\chi^2$  test and Fisher exact test, and compared serum etonogestrel levels stratified by body mass index using the Kruskal-Wallis test.

**RESULTS:** Implant users ( $n = 291$ ) have contributed 444.0 woman-years of follow-up. There have been no documented pregnancies in implant users during the 2 years of postexpiration follow-up. Calculated failure rates in the fourth and fifth years for the implant are calculated as

0 (1-sided 97.5% confidence interval, 0–1.48) per 100 woman-years and 0 (1-sided 97.5% confidence interval, 0–1.48) per 100 woman-years at 5 years. Among 496 levonorgestrel intrauterine device users, 696.9 woman-years of follow-up have been reported. The failure rate in the fourth and fifth years for the levonorgestrel intrauterine device is calculated as 0.43 (95% confidence interval, 0.04–1.42) per 100 woman-years; failure rate in the seventh year is 0.43 (95% confidence interval, 0.08–0.78) per 100 woman-years. Among implant users with serum etonogestrel level at the time of method expiration, 166.1 pg/mL (range 63.8–81.8 pg/mL) at the end of the fourth year, and 153.0 pg/mL (range 7.9–251.0 pg/mL) at the end of the fifth year. Median etonogestrel levels were similar by body mass index at each time point and a statistical difference was not noted at the end of 4 years of use with overweight women. The highest serum etonogestrel level was 195.9 pg/mL (range 25.0–450.5 pg/mL) compared to normal (178.9 pg/mL; range 87.0–463.7 pg/mL) and of 195.9 pg/mL (range 66.0–470.5 pg/mL) women ( $P = .04$ ).

**CONCLUSION:** This study indicates that the contraceptive implant and 52-mg hormonal intrauterine device continue to be highly effective for at least 2 additional years of use. Serum etonogestrel levels and etonogestrel states median levels remain above the ovulation threshold of 90 pg/mL in all body mass index classes.

**Key words:** effectiveness, Food and Drug Administration—approved duration, implant, intrauterine device, prolonged use

Introduction



Thank you

