



# Testing a Service-Delivery Model for Offering Long-Acting Reversible Contraceptive Methods to Youth in Ethiopia

Policy Brief  
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health services that offer a wide range of contraceptive options and allow all individuals—including young people—to decide freely and responsibly whether, when, and how often they wish to have children.

Among Ethiopians aged 15-19, 12 percent of young women have started childbearing and only 5.2 percent of the group are using a modern contraceptive method despite high unmet need for spacing (30.3 percent) and total demand for spacing (52.9 percent).<sup>iii</sup> Although use of modern contraceptives has risen among young Ethiopians over the past five years (9.2 percent among 15-19 year olds; 31 percent among 20-24 year olds), the vast majority of them—like most young people across sub-Saharan Africa—are using short-acting methods. Among 20-24 year-olds, 4.5 percent are using implants, while 23.2 percent of the 31 percent of Ethiopian women in that age range using a modern contraceptive method are using injectables.<sup>iv</sup>

Young people's incorrect and/or inconsistent use of short-acting methods (barriers methods, oral pills, and injectables) contributes to the rampant occurrence of unintended pregnancies among youth using a contraceptive method. Evidence shows that adolescents tend to use short-acting methods less consistently and compliantly than their older counterparts, and long-acting reversible contraceptives (LARCs) (implants and intrauterine devices [IUDs]) are more effective than short-acting methods for exactly that reason: because there is little room for incorrect and/or inconsistent use.<sup>v</sup>

## About E2A

The Evidence to Action for Strengthened Family Planning and Reproductive Health Services for Women and Girls Project (E2A) is USAID's global flagship for strengthening family planning and reproductive health service delivery. The project aims to address the reproductive healthcare needs of girls, women, and underserved communities around the world by increasing support, building evidence, and facilitating the scale-up of best practices that improve family planning services.

Awarded in September 2011, this project will continue for eight years, until September 2019. The project is led by Pathfinder International, in partnership with ExpandNet, IntraHealth International, Management Sciences for Health, and PATH.

## About IFHP+

IFHP+ is a USAID-funded program that promotes an integrated model for strengthening family planning; reproductive health; and maternal, newborn, and child health services for rural and underserved populations. IFHP is implemented in 301 woredas of four major regions of Ethiopia by Pathfinder International and John Snow, Inc., in partnership with local implementing partner organizations.

## Introduction

The demography of Ethiopia reflects that of many other sub-Saharan African countries, which are experiencing a huge surge in their young populations. Globally, the number of young people aged 10-24 is fast approaching 2 billion and the majority of them live in the poorest countries, straining limited government capacities and resources.<sup>i</sup>

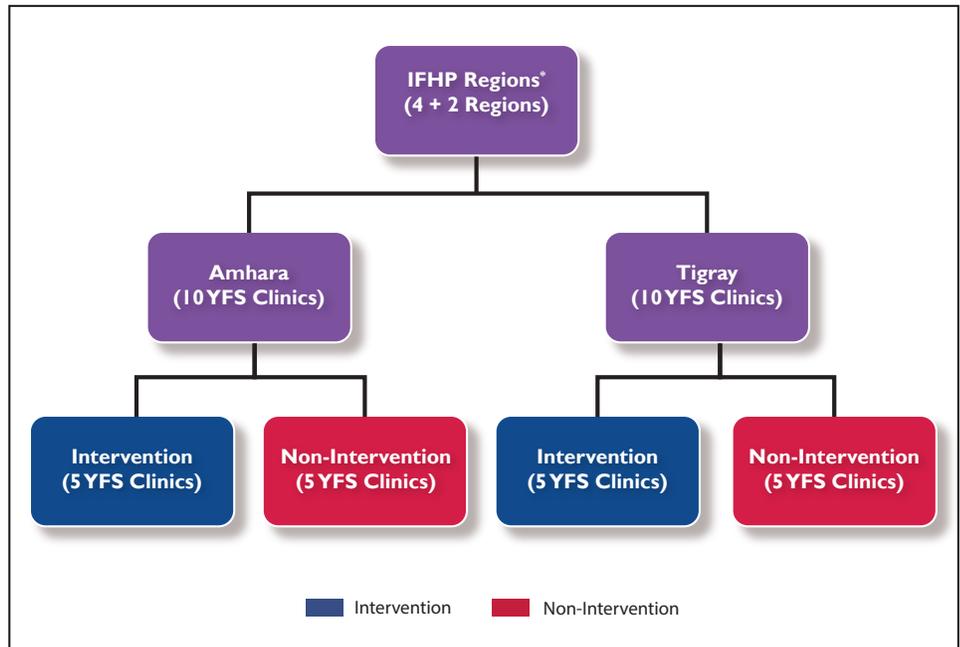
Approximately 33 million of this global youth population lives in Ethiopia.<sup>ii</sup> Governments, like Ethiopia's, are being challenged to make evidence-based investments in their youth that will drive economic returns and allow young people to claim their rights to health and development. To arrive at healthy working populations, with fewer dependents, and greater opportunities for growth and stability, it is widely acknowledged that birth and death rates must decline in the poorest countries—and Ethiopia is no exception. Resources must be spent on high-quality, accessible sexual and reproductive

## E2A and IFHP+ Study:

### LARCs for Youth

From June 2014 to April 2015, the Evidence to Action (E2A) Project in collaboration with the Integrated Family Health Program Plus (IFHP+) conducted a study at 20 youth-friendly health service sites in Amhara and Tigray regions of Ethiopia to test a model for offering contraceptive counseling and services to young people that includes LARCs. Half of the sites were intervention sites (5 in Amhara and 5 in Tigray); half non-intervention sites (5 in Amhara and 5 in Tigray); and all sites were a part of the IFHP+ youth-friendly services initiative. IFHP+, now in its seventh year, has scaled to 248 youth-friendly service sites in six regions across Ethiopia.

### Study Sites



**If only 20 percent of women who currently use oral pills or injectables in sub-Saharan Africa voluntarily switched to implants, approximately 1.8 million unintended pregnancies could be averted in a five-year period.**

Hubacher D, Mavranezouli I, McGinn E, "Unintended pregnancy in sub-Saharan Africa: magnitude of the problem and potential role of contraceptive implants alleviate it," *Contraception* (2008) 78:73-8.

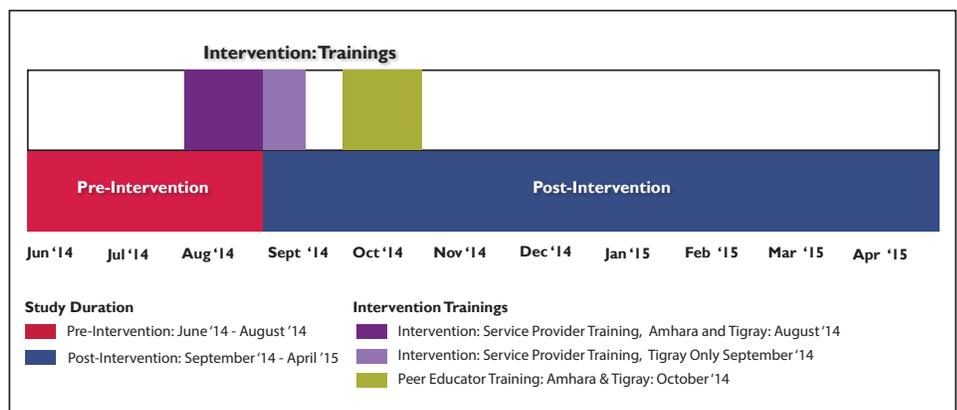
At intervention sites, national trainers from each region conducted the clinical training, supervised the practicums, and certified the trainees. In Amhara, two providers were trained from each site during a two-week intensive offsite classroom and practicum training. In Tigray, five providers from each site participated in a two-week intensive onsite training, for a total of 25 service providers. Thirty-four trainees were certified on implant and IUD insertion, removal, and infection control. IFHP+ conducts routine quarterly meetings with youth-friendly service providers and peer educators.

At quarterly meetings in October 2014, 250 peer educators from both regions participated in the refresher training for LARCs. The clinical training with youth-friendly service providers and refresher training with peer educators included pre- and post-test questionnaires. Monitoring and Evaluation (M&E) officers from both regions were trained to provide supportive supervision to the youth-friendly service providers and peer educators during their monthly visits at intervention sites. The non-intervention sites continued to offer IFHP+'s routine adolescent and youth

The service-delivery model tested at intervention sites included:

- Competency-based skills training on implant and IUD insertion, removal, and infection control
- Refresher training for peer educators to counsel (dispel myths and misperceptions) on safety and effectiveness of LARCs and refer
- Supportive supervision for data collection by study M&E officers and clinical services by relevant health center staff.

### Study timeline illustrating pre-intervention and post-intervention phases and intervention/training phases



sexual and reproductive health services by training providers to offer youth-friendly services; counsel on all contraceptive methods, including short- and long-acting methods; and offer short-acting methods onsite and refer to the main onsite family planning clinic for LARCs. The non-intervention sites also work with trained peer educators who offer contraceptive counseling during coffee ceremonies and talk shows, and refer young people to the clinic for contraceptive methods.

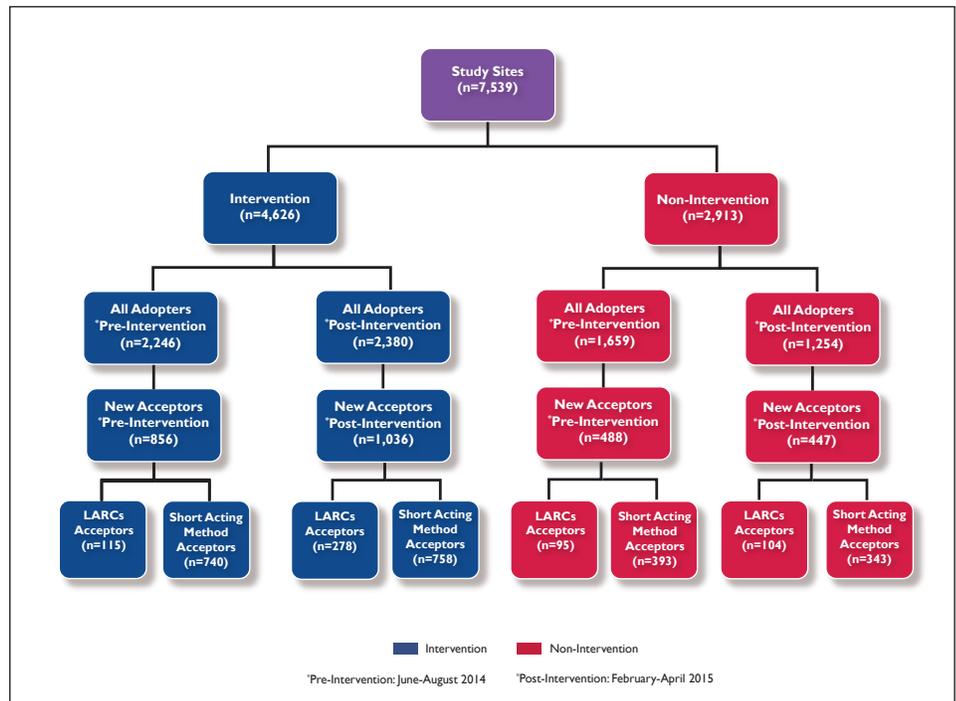
## Methodology

The study applied a quasi-experimental design to assess changes in method mix between the intervention and non-intervention sites. M&E officers from regional IFHP+ project offices reviewed monthly family planning registers and peer educators' records for the 11-month study period. To ensure data quality and provide supportive supervision to intervention sites, the M&E officers were trained to have a clear understanding of the study objectives and design, intervention approach, data-collection instruments, and their role in supportive supervision. They provided feedback on data quality, and barriers and challenges to service provision at intervention sites.

## Study Limitations

The study design was not an operations research study or a randomized clinical trial where the environment is carefully controlled. Instead, the project applied an implementation science approach that corresponded to field needs and intentionally aligned with IFHP+'s routine youth-friendly services program. Regional health bureaus made decisions about how the trainings were conducted, leading to five trained providers per facility in Tigray and two trained providers per facility in Amhara. Some providers in Tigray were trained to provide LARCs, but not youth-friendly

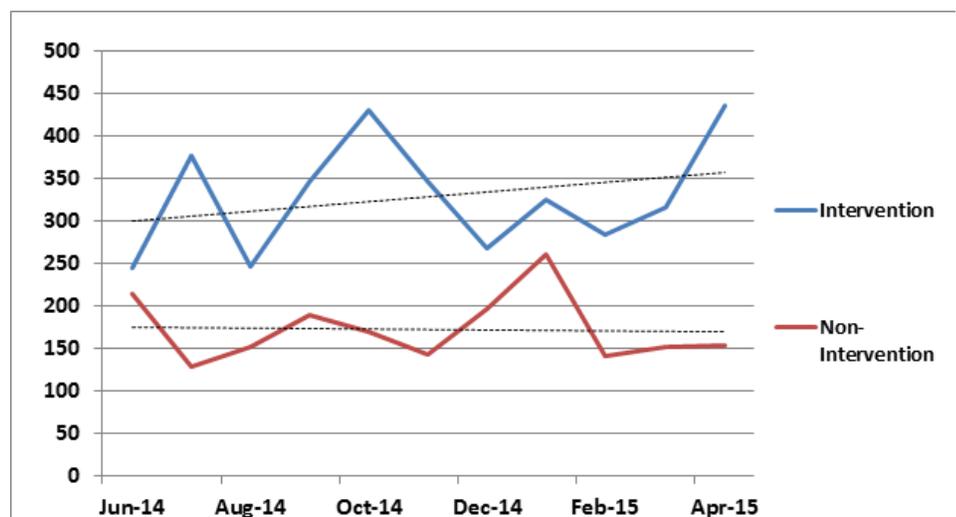
**Flow chart illustrating the numbers of all family planning adopters, new family planning acceptors, disaggregated by method accepted (long-acting reversible contraceptive and short acting methods); pre-intervention and post-intervention phases; by intervention and non-intervention youth friendly clinic study sites**



services, while in Amhara, all providers who were trained to provide LARCs were previously trained to provide youth-friendly services. This approach did not allow for uniformity between intervention sites in each region, and may have led to differences in method uptake. Some providers at both

intervention and non-intervention sites transferred, resigned or took extended leave, which may have adversely affected LARCs uptake. Some peer educators also took vacations, resigned, or became involved in income-generating schemes, which may have affected demand generation for LARCs.

**Number of new acceptors of LARCs during the study period (June 2014 to April 2015)**



## Key Findings

### Total new acceptors:

The study categorized contraceptive adopters into four groups: new acceptor (accepting a method for the first time in the facility); repeat acceptor (second or subsequent visit to the same facility for the same method); switcher (second or subsequent visit and switched methods); and removals (client visit to remove either IUD or implant). Most clients were repeat acceptors (58 percent) although a significant proportion (37 percent) was new acceptors. Over the course of the study period, the pattern in the proportion of new acceptors was slightly more at the intervention sites as compared to the non-intervention sites, with some monthly variation.

**Method mix:** Results indicate that the service-delivery model tested had a positive influence on the uptake of LARCs at intervention sites as compared to non-intervention sites.<sup>1</sup>

## Key Findings

**LARCs:** At pre-intervention, the percentage of new LARCs acceptors among all new acceptors at intervention sites was lower than at non-intervention sites, while during the post-intervention phase, the percentage of new LARCs acceptors among all new acceptors at intervention sites was greater than at non-intervention sites (see Graph 1).

Consequently, the probability of a young person adopting a long-acting method at pre-intervention and during the post-intervention period, at intervention sites compared to non-intervention sites, is shown below.

- At pre-intervention, for every 100 females who adopted LARCs at non-intervention sites, only 70 females

adopted LARCs at intervention sites.

- During the 8-month post-intervention phase, for every 100 females who adopted LARCs at non-intervention sites, 130 females adopted LARCs at intervention sites.

**Short-acting methods:** For short-acting methods, the percentage of new clients accepting a method at intervention sites was higher than at non-intervention sites, while during the post-intervention phase, the percentage of new acceptors at intervention sites was generally lower than in the non-intervention sites (see Graph 2).

Consequently, the probability of a young person adopting a short-acting method at pre-intervention and during the post-intervention period, at intervention sites compared to non-intervention sites, is shown below.

- At pre-intervention, for every 100 females who adopted a short-acting method at non-intervention sites, 107 females adopted a short-acting method at intervention sites.
- During the 8-month post-intervention phase, for every 100 females who adopted a short-acting method at non-intervention sites, 93 females adopted a short-acting method at intervention sites.

**Demand generation:** The findings illustrate that although there was demand generated by peer educators, this did not translate directly into referrals for contraceptive methods, including LARCs.<sup>2</sup>

**Contraceptive referrals (female):** At pre-intervention and during the post-intervention period, the percentage of females referred for contraceptive services by peer educators to non-intervention sites

The study shows that youth-friendly service providers trained to provide IUDs and implants in a safe and competent way increases the probability that these long-acting methods will be adopted by youth.

To be considered youth-friendly, the providers must be able to offer the methods in an environment where youth feel comfortable and safe and where other essential services for youth are offered simultaneously in a “one-stop-shop.”

was slightly higher than those referred to intervention sites (see Graph 3).

Consequently, the probability of a young female being referred for contraceptive services by peer educators at pre-intervention and during the post-intervention period, to intervention sites compared to non-intervention sites, is shown below.

- At pre-intervention, for every 100 females referred to non-intervention sites by peer educators, only 80 women were referred to intervention sites.
- During the post-intervention phase, for every 100 females referred to non-intervention sites, 75 women were referred to intervention sites.

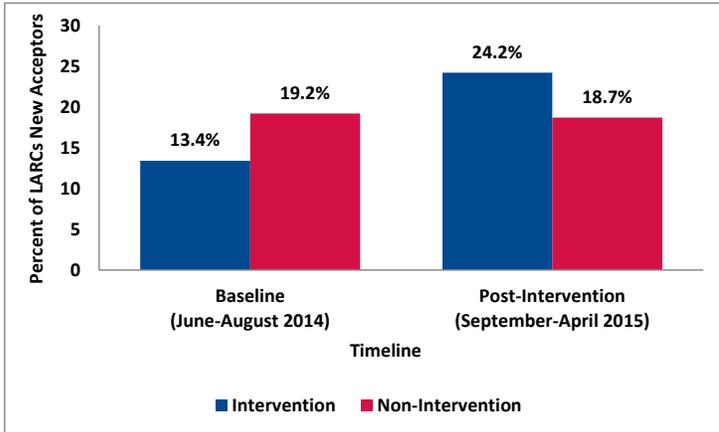
**LARCs referrals:** At pre-intervention and during the post-intervention period, the percentage of females referred for LARCs by peer educators to non-intervention sites was slightly higher than those referred to intervention sites (see Graph 4).

Consequently, the probability of a young female being referred for LARCs by peer educators at pre-intervention and during

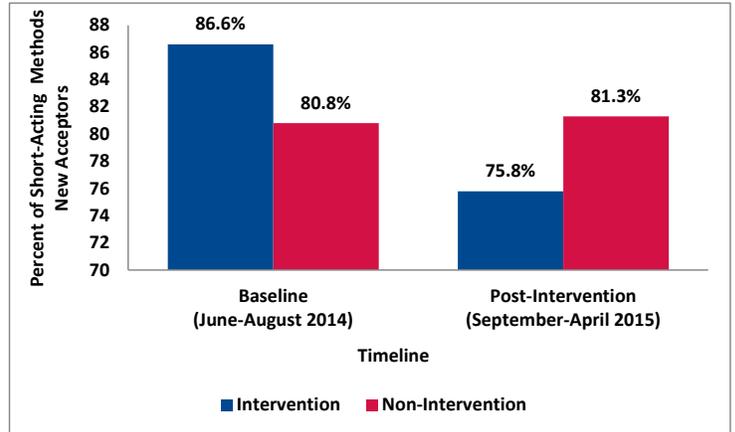
<sup>1</sup> The pre-intervention period for this data was from June-August 2014. The post-intervention phase for this data was from September 2014-April 2015.

<sup>2</sup> The pre-intervention period for this data was from June-October 2015. The post-intervention phase for this data was from November 2014-April 2015.

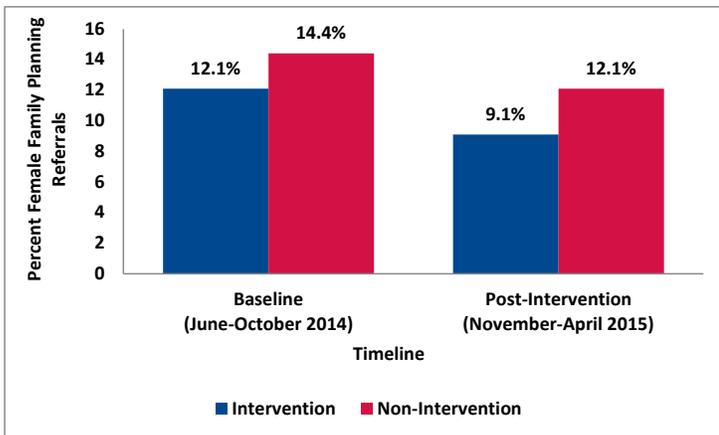
**Graph 1: Percent of New Acceptors who Adopted Long-Acting Reversible Methods at Intervention & Non-Intervention Sites at Baseline & Post-Intervention (June 2014 — April 2015)\*<sup>3</sup>**



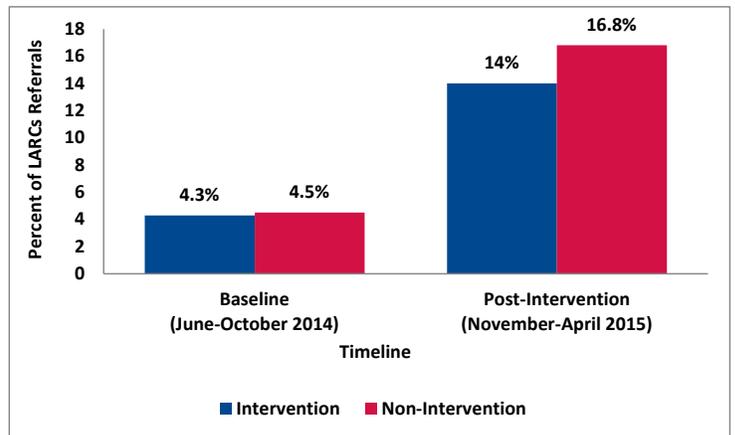
**Graph 2: Percent of New Acceptors who Adopted Short-Acting Methods at Intervention & Non-Intervention Sites at Baseline & Post-Intervention (June 2014 — April 2015)\*<sup>3</sup>**



**Graph 3: Percent of Females who were Referred for Contraceptives, Among those Counseled, to Intervention & Non-Intervention Sites at Baseline & Post-Intervention (June 2014 — April 2015)\*<sup>3</sup>**



**Graph 4: Percent of Females who were Referred for Long-Acting Reversible Contraceptives, Among those Counseled, to Intervention & Non-Intervention Sites at Baseline & Post-Intervention (June 2014 — April 2015)\*<sup>3</sup>**



\*<sup>3</sup> The probability for adopting a new method (LARCs or Short-acting method) or referral described in the text was calculated for each graph by: (a) dividing the percentage of new acceptors or referrals at baseline at intervention by non-intervention sites; (b) dividing the percentage of new acceptors or referrals during the post-intervention phase at intervention by non-intervention sites. For example, in Graph 1, at baseline (a), 13.4% was divided by 19.2%, translating into the probability that for every 100 females who adopted LARCs at non-intervention sites, only 70 females adopted LARCs at intervention sites. In Graph 1, during the post-intervention period (b), 24.2% was divided by 18.7%, translating into the probability that for every 100 females who adopted LARCs at non-intervention sites, 130 females adopted LARCs at intervention sites.

**Percent Distribution of Family Planning Clients' by Demographic Characteristics & Type of Site (Intervention and Non-Intervention) (June 2014 – April 2015)**

Demographic Characteristics	TOTAL %	Intervention %	Non-Intervention %
<b>FAMILY PLANNING CLIENTS - All adopters</b>			
Age	<i>n</i> = 14,857	<i>n</i> = 9,551	<i>n</i> = 5,306
< 15 years	0.2	0.1	0.3
15 – 19	40.2	39.5	41.5
20 – 24	59.6	60.4	58.2
Marital Status	<i>n</i> = 14,012	<i>n</i> = 8,883	<i>n</i> = 5,099
Married	76.9	76.3	78.1
Living together	7.8	7.2	9.0
Single	14.8	16.2	12.4
Divorced/separated/widowed	0.4	0.3	0.5
Parity	<i>n</i> = 13,998	<i>n</i> = 8,916	<i>n</i> = 5,082
Nulliparous	63.1	65.2	59.4
One	29.3	27.4	32.6
Two or more	7.6	7.4	8.0
<b>FAMILY PLANNING CLIENTS - New Acceptors</b>			
Age	<i>n</i> = 5,483	<i>n</i> = 3,599	<i>n</i> = 1,884
< 15 years	0.3	0.2	0.5
15 – 19	50.3	48.5	53.9
20 – 24	49.4	51.4	45.6
Marital Status	<i>n</i> = 5,043	<i>n</i> = 3,279	<i>n</i> = 1,764
Married	66.2	65.5	67.3
Living together	10.1	9.7	10.9
Single	23.2	24.4	21.0
Divorced/separated/widowed	0.5	0.4	0.8
Parity	<i>n</i> = 5,032	<i>n</i> = 3,282	<i>n</i> = 1,750
Nulliparous	76.4	78.8	71.9
One	19.7	17.9	23.1
Two or more	3.9	3.3	5.0
<b>FAMILY PLANNING CLIENTS - New LARCs Acceptors</b>			
Age	<i>n</i> = 1,137	<i>n</i> = 780	<i>n</i> = 357
< 15 years	0.1	0.1	0.0
15 – 19	57.3	53.3	66.1
20 – 24	42.6	46.5	33.9
Marital Status	<i>n</i> = 1,064	<i>n</i> = 735	<i>n</i> = 329
Married	66.6	71.0	56.8
Living together	12.2	12.2	12.2
Single	21.0	16.6	30.7
Divorced/separated/widowed	0.2	0.1	0.3
Parity	<i>n</i> = 1,064	<i>n</i> = 735	<i>n</i> = 329
Nulliparous	78.8	81.1	73.6
One	16.9	15.4	20.4
Two or more	4.3	3.5	6.1

This study suggests that there may be a growing pattern among nulliparous women—defined as those who have not yet had a live birth—to seek contraceptive services, and in particular, to choose long-acting methods.

During the study period, 63 percent of women who attended youth-friendly services were nulliparous and a remarkable 81 percent of women who accepted a long-acting method for the first time at intervention sites were nulliparous.

may be a growing pattern among new nulliparous acceptors to opt for LARCs. Of the 13,998 women who attended youth-friendly services for contraceptives during the study period, 63.1 percent were nulliparous and 7.6 percent had two or more births (higher parity). The pattern remained the same among all new acceptors (nulliparous: 76.4 percent; higher parity: 3.9 percent) and among new acceptors of LARCs (nulliparous: 78.7 percent; higher parity 4.3 percent) with a discernible shift at intervention sites (nulliparous: 81.1 percent; higher parity: 3.5 percent) as compared to the non-intervention sites (nulliparous 73.6 percent; higher parity 6.1 percent).

**Marital status and method uptake:**

The results show that while the majority of all clients are married (76.9 percent), a substantial proportion are single (14.8 percent) or living together (7.8 percent). However, among all new acceptors, a larger proportion are single (23.2 percent) or living together (10.1 percent). These findings imply that there may be a growing pattern among those that are single or living together to seek contraception.

the post-intervention period, at intervention sites compared to non-intervention sites, is shown below.

- At pre-intervention, for every 100 females referred for LARCs to non-intervention sites by peer educators, 90 females were referred for LARCs to intervention sites.
- During the post-intervention phase, for

every 100 females referred for LARCs to non-intervention sites by peer educators, 83 females were referred for LARCs to intervention sites.

**Other Findings**

**Delaying first pregnancy:**

The findings imply that young women are delaying their first pregnancy and that there

## Recommendations

**Train youth-friendly service providers on LARCs:** Training youth-friendly services providers to counsel and provide short- and long-acting methods at one location has the potential to increase the uptake of LARCs among youth. To maximize the benefits of full method choice for youth, all service providers should receive additional skills training to offer full method choice. While institutionalizing such trainings might take a long time, a phased approach should commence with LARCs training for all youth-friendly service providers and subsequently expand to include all providers through pre- and in-service trainings.

**Strengthen peer educator trainings:** There were few females referred for contraceptives, or specifically for LARCs, by peer educators. Subsequent trainings with peer educators on LARCs should devote significant efforts to encourage peer educators to dispel myths and misconceptions about LARCs and refer women for contraceptive counseling and services, including LARCs.

**Design studies that examine service providers' attitudes to LARCs for adolescent and young people and client satisfaction:** This study did not examine service providers' attitudes toward LARCs or client satisfaction with LARCs. A study that examines these elements would have provided a much richer assessment of the contribution of various supply-side attributes to improving LARCs uptake.

**Design studies that examine peer educators' role in creating demand for contraception, including LARCs:** Although the study described here did not document peer educators' contribution to generating demand for LARCs, future research should include qualitative and quantitative studies that offer a better understanding of peer educators' role in demand generation.

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## Citations

<sup>i</sup>United Nations Population Fund, "State of World Population 2014, the power of 1.8 billion," accessed June 10, 2015, <http://www.unfpa.org/swop>.

<sup>ii</sup>Central Intelligence Agency, "The World Factbook," accessed July 20, 2015, <https://www.cia.gov/library/publications/the-world-factbook/geos/et.html>.

<sup>iii</sup>Central Statistical Agency [Ethiopia] and ICF International, *Ethiopia Demographic and Health Survey 2011*, (Addis Ababa, Ethiopia and Calverton, Maryland, USA: 2011).

<sup>iv</sup>Central Statistical Agency [Ethiopia], *Ethiopia Mini Demographic and Health Survey 2014*, (Addis Ababa, Ethiopia: 2014).

<sup>v</sup>Blanc AK, Tsui AO, Croft TN and Trevitt JL, "Patterns and trends in adolescents' contraceptive use and discontinuation in developing countries and comparisons with adult women," *International Perspectives on Sexual and Reproductive Health* (2009) 35(2):63–71.



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