Development and Uptake of Long-Acting Reversible Contraception Services in Rwanda, 2009–2016

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Abstract

Background: Long-acting reversible contraception (LARC) is highly effective at preventing pregnancy. However, in sub-Saharan Africa, LARC education for clients is relatively limited and providers are often not skilled in their insertion. Before 2009, only 1% of family planning clients in Rwanda received an LARC.

Materials and Methods: We trained Rwandan government clinic nurses to promote, insert, and remove copper intrauterine devices (IUDs) and hormonal implants. Training started in two large urban clinics, and those nurses trained three successive waves of clinic nurses. Initial LARC promotions were clinic based, but in 2015 included community-based promotions in eight clinics. We compare IUD and implant insertions by year and clinic and discuss implementation successes/obstacles.

Results: From 2009 to 2016, 222 nurses from 21 government clinics were LARC trained. The nurses performed 36,588 LARC insertions (19% IUD, 81% implant). LARC insertions increased over time, peaking at 8,897 in 2013. However, in 2014, the number dropped to 4,018 after closure of one large clinic, funding discontinuation, and supply stock-outs. With new funding in 2015, insertions increased reaching 8,218 in 2016. Catholic and non-Catholic and rural and urban clinics performed similarly, whereas clinics affiliated with community-based promotions performed better (p > 0.05). Between 2012 and 2014, 13% of family planning initiators chose the implant and 4% the IUD.

Conclusions: LARC supply-demand services increased the proportion of family planning initiators choosing LARC to 17%. Challenges included inconsistent funding, irregular supplies, and staff turnover. Rural and Catholic clinics performed as well as urban and non-Catholic clinics. Concerted efforts to improve IUD uptake are needed.

Keywords: long-acting reversible contraception, Rwanda, intrauterine device, contraceptive implant

Introduction

THE GOVERNMENT OF RWANDA, a country with one of the highest population densities in Africa, has set goals to decrease the total fertility rate and increase coverage for modern contraceptive use.^{1,2} Among Rwandan women of ages 15–49 years, modern contraceptive use prevalence is estimated at 53% to 48% among married women and 31% among all women, and unmet need for family planning affects almost 20% of women.³ The Ministry of Health (MoH)

acknowledges the benefits of family planning to prevent unplanned pregnancy, improve birth spacing, and lower maternal and infant morbidity.¹ In addition, given a generalized HIV epidemic,³ fertility management to prevent unplanned pregnancy among women with or at risk of HIV is an essential component of HIV prevention.⁴

Several obstacles to increase uptake of family planning have been described in Rwanda. For example, family planning services are provided to women but not routinely to couples making joint fertility decisions, and a large percentage

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of government health centers in Rwanda are Catholic run and may not provide contraception.¹ In addition, relatively few nurses in sub-Saharan Africa are trained to insert the most effective long-acting reversible contraception (LARC) insertions—the copper intrauterine device (IUD) and the hormonal contraceptive implant—and clients receive limited integrated adequate counseling about these methods.^{5–12}

As a result, among reproductive age modern contraceptive method users, user-dependent methods such as oral contraceptive pills (OCPs) and progesterone-based injectables (usually depot medroxyprogesterone acetate [DMPA]) are the most commonly used, reported by 16.9% and 51.1% of women, respectively.¹³

Typical contraceptive method failures on OCPs or DMPA are high at 6%–9% per year, respectively.¹⁴ In contrast, for women who wish to end childbearing or delay pregnancy, methods such as the copper IUD and the contraceptive implant are not subject to user error or resupply and are cost-effective over the long term.¹⁵ Once inserted by a clinician, the copper IUD is approved for up to 10 years of use,¹⁶ and the percentage of women experiencing an unintended pregnancy within the first year with typical use is 0.8%.¹⁴ Contraceptive implants provide effective contraceptive coverage for 3–5 years,¹⁶ and the percentage of women experiencing an unintended pregnancy with typical use is 0.05% per year.¹⁴

Historically, LARC methods were only available in a few specialized urban centers in Rwanda. As elsewhere, factors limiting the use of the IUD and implant include misconceptions about their safety, lack of knowledge about the mechanism of action, provider discomfort or inadequate training, lack of social marketing, and culture-specific concerns re-lating to LARC use.^{5–11,17,18} This cycle can only be broken if both LARC supply-and-demand are improved simultaneously. Overcoming misconceptions and knowledge gaps among providers and patients is an important initial step toward increasing LARC uptake. Projet San Francisco (PSF, an Emory University-affiliated nongovernmental organization based in Kigali, Rwanda) provided training in promotions, insertion, and removal of the copper IUD and Jadelle implant in government clinics from 2009 to 2016. In this article, we report the stepwise expansion from 2 to 21 clinics and describe the trends in provision and uptake of LARC service associated with the program. In addition, we assess differences related to clinic location (urban vs. rural) and religious affiliation (Catholic vs. non-Catholic).

Materials and Methods

Formative work (2009-2011)

Activities conducted in preparation for the LARC services implementation included equipment and supply needs assessments; focus groups; interviews; and knowledge, attitudes, and practice surveys conducted with nurses to inform development of IUD/implant training modules. The surveys contained multiple-choice questions assessing knowledge about medical eligibility criteria, duration of effect, mechanism of action, and side effects for the IUD and implant; true/false questions to assess knowledge about LARC in general; multiple-choice questions focused on provider attitudes; and questions about practices related to both familyplanning provision and nurse training. We also conducted a clinic needs assessment at the two highest volume clinics in Kigali to review existing government LARC training modules and counseling tools. We then developed LARC promotional, counseling, and insertion training tools based on the knowledge and practice gaps identified. Data from the formative work are described quantitatively using counts and percentages.

LARC promotions tools and training

An educational LARC flipchart was developed for clinicbased promotion to assist nurses and counselors to deliver consistent comprehensive information on the IUD and implant. In 2012, PSF also developed an informational video on LARC to be played in clinic waiting rooms. Video content was derived from the LARC flipchart and presented by PSF nurses. The video was shared with the MoH and distributed to clinics as needed. Another promotions strategy launched in 2015 was task-shifting LARC promotions from nurses to community health workers (CHWs) affiliated with eight of the selected clinics. CHWs were incentivized with 0.63 USD per insertion resulting from CHW promotion and referral.

LARC provider trainings

Development of didactic and practicum training materials for IUD and implant insertions relied on theories of competency-based training,^{19,20} standard resources in family planning such as the World Health Organization's (WHO) "Family-planning: A Global Handbook for Providers,"21 and MoH teaching modules and clinic checklists that were adapted to include pertinent information about IUDs and implants. Careful attention was given to addressing misconceptions identified during focus groups and surveys. Training tools included a slide-based visual presentation, handouts, and competency-based checklists to be used when performing practical insertions. Training materials were finalized in 2010. The LARC training consisted of a 2-day didactic session provided by PSF staff followed by a 3-day active counseling and practicum session in a training center. Each trainee had to correctly insert and remove five IUDs and five implants under supervision, either at the training center or at their health center to receive certification.

Clinic selection

Using data from government clinic monthly reports, PSF evaluated LARC program provision to identify clinics for implementation of the supply and demand program. In total, 21 Kigali clinics were included in the implementation that we classify by "Wave" of implementation. PSF began implementation in the two highest volume non-Catholic clinics (Wave 1: Muhima and Gitega) in 2009, which then served as training centers for four additional high-volume non-Catholic clinics in 2010 (Wave 2: Kabusunzu, Kacyiru, Kimironko-Remera, Kinyinya). By 2012, LARC uptake increased significantly at these six health centers, training of trainers was provided to LARC-certified government staff, and all six clinics became training centers. Eight non-Catholic rural clinics joined in 2012 (Wave 3: Busanza, Butamwa, Gahanga, Gihogwe, Kabuye, Kagugu, Nyacyonga, Rugarama), and seven new health centers joined in 2015 (three Catholic clinics and four non-Catholic clinics) (Wave 4: Avega, Bethsaida, Gatenga, Gikondo, Kicukiro, Masaka, and Nyarugunga). The eight clinics in which affiliated CHWs were trained to promote LARC in 2015 were Nyarugunga, Kabuye, Gahanga, Butamwa, Gatenga, Busanza, Bethsaida, and Kicukiro.

Implementation methods

Nurses promoted and counseled clients in family planning, infant vaccination, and antiretroviral therapy services within the clinics, and in 2015, these tasks were shifted to CHWs who promoted in both the clinics and communities. Although Catholic clinics do not traditionally counsel women on modern family planning methods, during our program, nurses and CHWs affiliated with the Catholic clinics were encouraged to refer women interested in modern methods to the clinic-affiliated health post or to nearby non-Catholic clinics where our LARC program was operating. Fertility goal-based counseling included LARC promotion for clients wanting to limit or space conception for ≥ 2 years. To offset the additional time needed for LARC in comparison with other family planning methods, clinics were given incentives of 0.63 USD per IUD or implant inserted, in-line with the MoH initiative to motivate providers through a performance-based financing system.²² These incentives were then distributed by the clinic to the individual nurses according to their performance. This incentive was in addition to nurses' regular salaries (124-198 USD/month depending on education level). PSF continued to provide training and technical assistance (TTA) and monitoring and evaluation (M&E) to ensure adequate staff, supplies, and activities. There was a hiatus in 2014 during which there was no funding for PSF oversight of the LARC program or payment of incentives for promotion and LARC insertions. During this time, one large clinic closed (unrelated to our study/funding), stock-outs were common, and staff turnover reduced the number of trained LARC promoters and providers. New funding for the LARC program began in 2015.

Data collection, quality control, and analysis

Data on the number of family planning initiators and LARC insertions were extracted from government clinic family planning logbooks that were filled out by government nurses. Logbook data quality control was conducted by the incharge nurse, the head of the clinic, and a PSF nurse-trainer. Data entry in Excel and analysis were conducted by PSF staff. We describe total number of IUD and implant insertions by clinic, wave, and year from 2009 to 2016.

We also calculated the association between the number of LARC methods inserted per year and clinic religious affiliation (Catholic or non-Catholic) and location (urban or rural), controlling for clinic volume using general linearized models (v9.4; SAS, Cary, NC). In a subanalyses, we explored the association between the clinics affiliated with CHW promotions and the number of LARC methods inserted in 2016, controlling for clinic religious affiliation, location, and volume.

Owing to changes in data recording in the government clinics, consistent denominators for the number of new family planning clients were only available from 2012 to 2014. For this time frame, we measured the proportion of new initiators that chose an LARC method.

Ethics

Formative work with health care providers was approved by the Office for Human Research Protections registered institutional review boards in Rwanda and at Emory University. Written informed consent was obtained. Programmatic service data extracted from government family planning logbooks were unlinked to identifiers and exempt from IRB review.

Results

Formative work

Among 42 nurses interviewed, almost all (95%) were able to identify the benefits of the IUD and implant as long acting and 84% agreed with the time-saving aspects of these methods for clients and providers. A total of 100% and 92% of respondents were able to cite the correct number of years of action for the IUD and implant, respectively. However, factual knowledge was much higher for the implant versus the IUD: only 24% of nurses were able to correctly identify the mechanism of action of the IUD, compared with 84% for the implant. Knowledge of device medical eligibility criteria was also better for the implant than for the IUD, although knowledge of the contraindications for each device was low and often confused with contraindications for other methods. For example, when asked to identify an active genital infection as an absolute contraindication to an IUD, only 20% of nurses were able to do so. Only 4% of nurses correctly identified the side effects of the implant. Nurses often incorrectly associated IUD with increased risk of contracting a sexually transmitted infection and increased risk of birth defects and infertility. Regarding provider attitudes toward LARC methods, 40% indicated fear of complications from insertion, and 50% indicated concern about their lack of ability to insert.

From the needs assessment conducted at the two Wave 1 high-volume facilities in 2009, an autoclave was found to be available only 1 day each week, although family-planning services were offered twice weekly. Both clinics had rooms dedicated to family planning but only one clinic had a gynecological examination table. Neither clinic had hands-free lighting for pelvic examinations. There were multiple pistons and trochars at both sites but only two sets of IUD insertion tools were available at one clinic with none available at the other. General information about family planning was presented in the waiting area, but IUD and implants were not mentioned. Only 1 woman per month received an IUD and between 6 and 11 women per month received implants at these facilities.

Total LARC insertions across all clinics, 2009-2016

From 2009 to 2016, PSF trained 222 nurses from the 21 government clinics who performed 36,588 LARC insertions (6,962 [19%] IUD insertions and 29,626 [81%] implant insertions) (Fig. 1). The number of family planning clients who requested IUD and implant methods increased steadily from 2009 (n = 216) to 2013 (n = 8,897). In 2014, funding for TTA, M&E, and PBF performance based financing ended and one



FIG. 1. Total LARC insertions, Rwandan government clinics, 2009–2016. IUD, intrauterine device; LARC, long-acting reversible contraception. FP, family planning; TTA, training and technical assistance; M&E, monitoring and evaluation; PBF, performance based financing; CHW, community health worker.

large Wave 1 clinic closed. With new funding in 2015 allowing resumption of activities and launched Wave 4, the number of LARC insertions increased to n=6,309 in 2015 and to n=8,218 in 2016.

LARC insertion trends by wave, clinic, and year

The first wave of two high-volume urban non-Catholic clinics (Muhima and Gitega) had small number of insertions as training was provided in 2009 and 2010 (Fig. 2). These clinics reached a peak in 2012 and 2013 with a yearly average

of 868 and 725 insertions, respectively. Gitega clinic closed in 2014. The four clinics in Wave 2 were also large urban non-Catholic clinics and began to insert substantial number of insertions in 2012 (average 815, range 616–1,289), dropping off in 2014 (average 403, range 170–513), increasing in 2015 (average 659), and decreasing again in 2016 (average 455). Eight Wave 3 rural non-Catholic clinics were launched in 2012 and showed great variability in the number of insertions provided though all experienced steep reductions in 2014. Kabuye, Gahanga, and Kagugu provided a high number of insertions in 2013 (761, 887, and 762, respectively) as



FIG. 2. LARC insertions by clinic, wave, and year, Rwandan government clinics, 2009–2016.

did Kabuye and Gahanga again in 2016 (1,010 and 660, respectively). The remaining five Wave 3 clinics reached <1,500 total LARC insertions each from 2012 to 2016 with variable annual performance. Wave 4 clinics showed similar variability in 2016 (the year after their launching) with an average of 336 insertions per clinic, and the three Catholic clinics included the clinic with the largest number of insertions (Kicukiro with 819 insertions) and the two clinics with the lowest number of insertions (Gikondo with 99 insertions and Masaka with 120 insertions).

IUD and implant insertions by clinic and year

IUD (Fig. 3A) and implant (Fig. 3B) insertions by clinic and wave of clinic implementation are shown (note differences in x-axes for IUD and implant). The two high-volume Wave 1 clinics were also training centers and as such, consistently inserted a high number of IUDs (peaking at 596 insertions in 2012) and a relatively high volume of implants (peaking at 1,262 insertions in 2011). LARC method uptake again increased in Waves 2 and 3 (with Wave 3 IUDs peaking at 924 insertions and implants peaking at 3,488 insertions both in 2013) until decreasing in 2014. Again, the overall improvement in both IUD and implant insertions is notable between 2015 and 2016. Differences between clinics were observed. The lower volume clinics (mostly Wave 4 clinics) inserted fewer methods but with an upward trend over their 2 years of operation.

LARC insertion comparisons in rural and urban Catholic and non-Catholic clinics

Controlling for clinic volume and religious affiliation, we did not observe any statistically significant differences between insertions of LARC overall, IUD, or implant per year for urban versus rural clinics, although a trend was observed for more annual implant insertions in urban clinics (p = 0.066) (Table 1). Controlling for clinic volume and urban or rural



FIG. 3. (A) IUD insertions by clinic and year, Rwandan government clinic, 2009–2016. (B) Implant insertions by clinic and year, Rwandan government clinics, 2009–2016.

TABLE 1. INSERTIONS PER YE	AR OF LONG-ACTING	REVERSIBLE (CONTRACEP	TION SERVIC	E IMPLEMENT.	ation, Rw	andan Gov	FRNMENT CLI	NICS, 2009–2	016
		LARC in	sertions pe	er year	IUD ins	ertions per	year	Implant	insertions pe	r year
	No. of clinics	Median	IQR	p^{a}	Median	IQR	p^{a}	Median	IQR	\mathbf{p}^{a}
Primary model Clinic locale										
Urban	11	581	310	ref	LL	89	ref	445	330	ref
Rural	10	362	137	0.079	61	44	0.275	307	143	0.066
Keligious affiliation Non-Catholic	18	411	258	ref	71	69	ref	377	219	ref
Catholic	3	398	670	0.804	LL	88	0.796	321	582	0.650
Subanalysis model (2016 data only)										
CHW promotions CHW promotional clinics	∞	241	537	ref	31	74	ref	206	428	ref
Non-CHW promotional clinics	13	58	21	0.001	8	8	0.029	55	23	0.001
^{a}p -Value from linear regression, adjus CHW, community health worker; IQR	sted for all other variable \$, interquartile range; IU	es shown and cl JD, intrauterine	linic volume. device; LAR	C, long-acting	g reversible cont	raception.				

location, we did not observe any statistically significant differences between insertions of LARC overall, IUD, or implants per year for Catholic versus non-Catholic clinics. Clinics affiliated with community-based LARC promotions performed significantly more IUD and implant insertions in 2016 (p > 0.05).

Proportion of new family planning initiators choosing IUD from 2012 to 2014

Among new family planning initiators, we observed an overall IUD uptake of 4% of new family planning users in Waves 1 and 2 and 3% in Wave 3 clinics (Fig. 4A, B). Variability between clinics was marked, with Kacyiru and Muhima both with 8% overall (and peaks of 10% and 12%, respectively). Similarly, in Wave 3 rural clinics, Kabuye performed well, with an average of 12% (and a peak of 19%).

Proportion of new family planning initiators choosing implant from 2012 to 2014

Among new family planning initiators, we observed an overall implant uptake of 14% in Waves 1 and 2 urban clinics and 11% in Wave 3 rural clinics (Fig. 5A, B). As with the IUD, there was considerable variation between clinics. Positive outliers in Waves 1 and 2 were Kacyiru (30% average, 40% peak), and Kimironko (17% average, 32% peak). Among the eight Wave 3 rural clinics, notable positive outliers included Kabuye (20% average, 38% peak), Nyacyonga (20% average, 35% peak), and Kagugu (13% average, 28% peak).

Discussion

Implementing provider and promoter trainings developed after formative work significantly increased the percentage of IUD and implant insertions in Rwandan government clinics from <1% before 2009²³ to 17% in 2014. After adjustment, rural and urban clinics performed similarly, Catholic and non-Catholic clinics performed similarly, and clinics affiliated with community-based promotions performed better. As in other studies and programs, the implant was more popular than the IUD (89% vs. 11% of insertions, respectively). The percentage of new family planning initiators selecting an IUD (4%) in the implementation clinics between 2012 and 2014 was higher than the nationwide method mix for IUD in 2014/2015 among modern method users $(2.5\%^3)$, and reached averages of 8%-12% in some facilities, including 12% in one rural facility. Meanwhile, the percentage of new family planning users selecting an implant (13%) in the implementation clinics between 2012 and 2014 was lower than the nationwide method mix for implant in 2014/2015 among modern method users (16.9%¹³), but varied greatly by facility: one urban facility during this time period reached 30% implant insertion uptake and two rural facilities reached 20%–29%, much higher than the national average. Although the intervention prompted a 37% increase in LARC insertions between 2009 and 2016, the population of Kigali grew by \sim 50% during the study time frame to \sim 380,000 reproductive age women in 2016^{13} ; thus the total number of LARC clients served in our 8-year implementation (n=36,588)represents less than a 10% of women of reproductive age in Kigali. These women represent both new modern method



FIG. 4. (A) Proportion of family planning choosing copper IUD by clinic and quarter (Waves 1 and 2), Rwandan government clinics, 2012–2014. (B) Proportion of family planning choosing copper IUD by clinic and quarter (Wave 3), Rwandan government clinics, 2012–2014.

users (and thus contribute to the total proportion of women using contraception in Kigali) and women who have switched from short-term methods that are associated with higher unintended pregnancies rates.¹

Overall, rural clinics performed similarly to urban clinics, particularly with regard to the IUD. This important finding supports the feasibility of providing LARC to the rural population (70% of the population is rural).²⁴ The unmet need for contraception among married women is higher in rural than in urban areas³ and long acting user independent methods could help alleviate this. Working in rural areas is challenging given that lack of knowledge and misconceptions about LARC may be higher.^{25–28} In addition, Catholic clinics overall performed similarly to non-Catholic clinics, indicating feasibility of working in these clinics. For nationwide scale-up of effective family planning services, it is critical to work with Catholic clinics as many as 60% of clinics²⁹ and 57% of the population³⁰ in Rwanda are Catholic. As Catholic clinics do not provide modern contraception, the MoH has ensured that health posts adjoining or nearby non-Catholic clinics provide family planning.³¹ All clinics are staffed by government nurses, thus although the coadministration may be Catholic, neither staff nor clients are required to be Catholic. The willingness of staff to refer patients to the health posts for contraception and clients to accept those referrals confirms this is a workable model. Clinics affiliated with community-based promotions performed significantly more IUD and implant insertions in 2016, and CHW promotions may be a critical mechanism to increase knowledge of LARC methods in the community as well as uptake among interested women.

As observed in other LARC implementation programs, the implant was more popular than the IUD. During an LARC program implementation between 2008 and 2012 across 15 sub-Saharan countries led by Marie Stopes International (MSI), researchers reported stronger demand for implants versus IUDs.³² Between 2008 and 2014, they found that uptake of IUDs and implants increased 429% and 1,567%, respectively. The authors suggest that implant uptake was higher than IUD uptake because of higher acceptability of implants, length of efficacy, or preference for hormonal methods. However, several other studies indicate that IUD uptake challenges, such as lack of client knowledge and poor provider training, can be overcome. During the initial phase of an LARC scale-up program in Uganda, the majority (70%) of clients received an implant and 25% received an IUD. However, a quality improvement program in 2013 found that many clients had not been adequately counseled on the IUD and that provider confidence in IUD provision was lacking. After provider retraining and implementation of strategies to reduce supply-side barriers, the proportion of women choosing IUDs increased significantly.³³ Similarly, an LARC



FIG. 5. (A) Proportion of family planning choosing implant by clinic and quarter (Waves 1 and 2), Rwandan government clinics, 2012–2014. (B) Proportion of family planning choosing implant by clinic and quarter (Wave 3), Rwandan government clinics, 2012–2014.

service scale-up in Chad and the Democratic Republic of Congo in 2011 found higher demand for implants versus IUDs during the initial months of implementation.³⁴ As a result, researchers increased efforts to improve knowledge of the IUD using mass media and community channels while providing refresher IUD insertion training to providers. After these efforts, IUD uptake greatly increased.³⁴ Thus, although the IUD is less well known than the implant in many countries including Rwanda^{11,34–36} and providers may be less practiced in inserting IUDs,^{5–7} concerted promotional and provider training efforts can improve IUD uptake.

It is critical to underscore that provider training is not sufficient to increase demand,³⁷ especially for the less well-known IUD, and multiple demand creation strategies are needed. In a multipronged LARC implementation in Kenya conducted between 2011 and 2014, the program included mentoring, commodity security, and multiple demand creation and service delivery strategies; implant uptake increased from 2.4% to 8.9%, and IUD uptake increased from 2.2% to 4.3%.³⁸ In an MSI report on the effectiveness of the LARC expansion, promotional strategies included local media/radio, promotions by CHWs and satisfied clients, and flyers/posters. When asked which source of information was

most important in influencing their decision to choose LARC services, 31.5% of clients cited a "person who used the service" or satisfied client who helped generate demand through informal communication.³⁹

Our experience confirms that LARC programs are not yet self-sustaining in government clinics and that reliable funding is needed to grow and sustain momentum. Historically, family planning programs have been implemented by international organizations⁴⁰ in collaboration with governments or public–private partnerships.⁴¹ In Rwanda, performancebased financing has resulted in improved service delivery quality, but the amount paid to providers is the same for any new family planning client regardless of method. This ignores the reality that LARC methods require more time, skill, and resources to insert and remove than OCPs or injectable contraception. We believe that our incentives contributed to LARC uptake as they offset the additional time needed for LARC provision. In a busy clinic with limited resources, it is essential that these obstacles be removed.

Limitations to our study include limited consistency in government clinic data collection across clinics and time precluding our ability to calculate uptake percentages except for the 2012–2014 time frame. We did not collect data on LARC removals because they were inconsistently documented in government clinic logs and could take place at nonstudy facilities, both of which could lead to incorrect estimation. However, relatively low discontinuation of LARC methods has been observed across sub-Saharan Africa.^{12,42} In addition, we did not gather detailed information on client demographics and were, therefore, unable to explore factors associated with family planning uptake. However, we and others have extensively reported on such factors across sub-Saharan Africa, which include client fertility intentions, education, religion, and male involvement.^{43–47}

Conclusions

We describe the successful implementation of LARC services in Rwanda using a multipronged approach focusing on supply and demand. Rural and Catholic clinics can be successfully included in LARC implementation, and task shifting to CHWs can increase the target population for promotion. Our and other successful LARC expansion initiatives^{32–34,38,48} exemplify the necessary components for sustainable service delivery including consistent funding; ensuring sustainable access to LARC methods as part of the method mix through strong supply chains and commodity security; collaboration between the private, public, and nongovernmental sectors; sufficient clinic infrastructure; and demand creation targeting clients with unmet family planning needs, use of diverse promotional strategies, and task shifting. Such strategies are urgently needed to meet the Family Planning 2020 goals in Rwanda.

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Disclaimer

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Author Disclosure Statement

No competing financial interests exist.

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