

Building Evidence to Support the Provision of Implants at Community Level through Task-Sharing

Operations Research, Kaduna and Cross River States, Nigeria

Policy Brief
January 2017



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. E2A is led by Pathfinder International, in partnership with ExpandNet, IntraHealth International, Management Sciences for Health, and PATH.

Background

Despite several years of donor investments in Nigeria, use of modern contraception is still low. The 2013 Nigeria Demographic and Health Survey (NDHS) showed that only 10%¹ of currently married women were using modern methods of contraception at the time of the survey, and only 0.4% reported using an implant. One of the factors inhibiting uptake of implants is the lack of providers trained to offer implants at health facilities.

To address these types of human resource shortages in resource-poor settings, the World Health Organization (WHO), in 2012, recommended targeted research on task-shifting (also referred to as task-sharing) for implants—that is, training lower-cadre health workers, such as community health workers, to provide implant insertion and removal services.² According to WHO, evidence

generated through the research could be used to encourage national policy changes allowing for task-sharing, and revisions and additions to existing task-sharing guidelines focusing on contraception.³

The operations research study described in this policy brief, “Building Evidence to Support the Provision of Implants at the Community Level through Task-Sharing,” directly responds to WHO's recommendations. Conducted from April 2015-June 2016 in Cross River and Kaduna states, Nigeria, the study assessed the effects of Community Health Extension Workers (CHEWs) providing implants on contraceptive uptake at health facilities in select Local Government Areas (LGAs) of the two Nigerian states. Evidence from the study will be used to support operationalization of a recent policy shift in Nigeria that expands CHEWs' current family planning (FP) tasks to include provision of implants.¹

The study set out to meet the following objectives:

1. Document the process, outcomes, and cost of training CHEWs to provide implants services, and identify the extent to which trained CHEWs meet international competency standards by the end of the training and during regular supervision visits.
2. Examine clients' experience and

¹The current Nigerian National Family Planning and Reproductive Health Policy guidelines and standards of practice identify CHEWs as facility-based providers of all FP methods except for surgical methods.

satisfaction with implant services obtained from CHEWs; and,

3. Examine how the provision of implants by CHEWs affects FP uptake, implant uptake, and contraceptive method mix.

Two similar studies were planned or conducted during the same period with support from USAID/Nigeria: one by the Jhpiego-led Targeted States High Impact Project (TSHIP) in Sokoto and Bauchi States⁹; and another planned by Marie Stopes Nigeria's Family Health Plus Project in one or two states at the initial stages of this study. To increase comparability among the three studies, E2A harmonized its methods and data collection tools with the other ongoing or proposed studies. E2A designed this study to generate additional multi-state evidence to support and guide implementation of the policy that would allow CHEWs to provide long-acting reversible contraception (LARC), specifically implants.

Training & Program Intervention

In both Kaduna and Cross River states, E2A/ Pathfinder Nigeria staff, in collaboration with the School of Health Technology and State Ministry of Health, organized a 10-day FP training with special focus on competency-based training approaches on insertion and removal of implants. Forty CHEWs (two CHEWs from each of the 20 intervention facilities in each state) participated in the training, which was conducted with the single rod Implanon and Jadelle.ⁱⁱ WHO Medical Eligibility Criteria (MEC), the national FP/RH service delivery protocol, and Jhpiego's revised and updated global training manual were adapted for the training. In addition to insertion and removal of implants,



participants learned about infection prevention, FP counseling, and commodity logistics management. Furthermore, the training provided a refresher on short-acting methods, which the CHEWs had already been providing. The training consisted of classroom-based instruction and practice of insertion techniques using model arms, followed by supervised clinical practice on counseling and insertion/removal of implants. The training also covered record keeping using NHMIS-approved registers and forms. To determine changes in knowledge and skills of trainees, pre- and post-training assessments were conducted.

During the training, the CHEWs were trained on “proactive” demand-generation approaches: for instance, group talks at antenatal care and immunization visits, holding event days, or screening all postpartum women during immunization and child health visits regarding their desire for postpartum FP (of which implants can now be offered). In order to increase community members' awareness, knowledge, and acceptance of the LARC services they provide, including implant services, the CHEWs conducted sensitization/mobilization activities in their communities.

In the months following the training, the CHEWs at the intervention sites provided FP services, including implant services, to women who demanded them. Government and Pathfinder/Nigeria staff provided post-training supportive supervision to ensure adherence to approved standards (WHO MEC and national FP/RH service delivery protocol) in providing implant services.

Assessing the effects of task-sharing on uptake of implants is meaningful only when clients who demand implants are able to obtain them. Consequently, measures were established to monitor the availability of commodities and other consumables in the intervention and comparison areas, and efforts were undertaken to ensure supply conditions at both intervention and comparison facilities were similar. The CHEWs at intervention facilities were trained to monitor the supply of FP commodities in their health facilities to track consumption, available stocks, and additional quantities needed.ⁱⁱⁱ

Methods

The operations research was conducted in two states of Nigeria: Kaduna in the North-West zone and Cross River in the

ⁱⁱ The Implanon NXT is currently being introduced in Nigeria in a phased approach.

ⁱⁱⁱ The quantities needed for any month were estimated as the number distributed in the previous month multiplied by 110%.

South-South zone. Both states were selected, in part, because Pathfinder International, in partnership with other organizations, had previously or were implementing FP demand-generation activities in the two states. From each state, two Local Government Areas (LGAs) with high demand for FP—one intervention LGA and one comparison LGA—were selected. In Cross River state, the intervention LGA was Akpabuyo and the comparison was Calabar South. In Kaduna state, the intervention LGA was Kajuru and the comparison was Igabi.^{iv} Within each LGA, 10 Primary Health Care (PHC) facilities with CHEWs as providers were randomly selected for the study (see Table 1 for distribution of health facilities). Two CHEWs were trained at each intervention facility.

The study lasted 15 months, from April 2015 to June 2016. The implant-related training intervention was conducted from June 15-27, 2015. For purposes of analysis, the study pre-intervention period was defined as April, May, and June of 2015. The post-training supervision and other elements of intervention continued until the end of March 2016. April, May, and June

of 2016 were therefore considered the post-intervention period. Uptake of FP during the three months before the study (pre-intervention) served as baseline data against which service data collected during the study/intervention were compared. FP uptake data were collected monthly once the study commenced from both the intervention and comparison sites to track changes in the uptake of implants (insertions and removals of Implanon and Jadelle) and method mix.

The operations research involved: (i) routine data collection to monitor program activities and outputs, including uptake of FP/LARC/implants and changes in method mix; (ii) baseline and endline assessments of CHEWs' experience inserting and removing implants, including the challenges they face while providing the services; (iii) observations of CHEWs to assess the extent to which they provide services according to national standards (quality of services); and (iv) exit interviews with FP (implants) clients to determine satisfaction with services obtained from the CHEWs (intervention sites^v) and other service providers (comparison sites).

While the collection and analysis of cost

data was initially part of the study protocol, it was not completed at the time of the preparation of this brief.

Provider interviews with two CHEWs at each facility generated information at baseline in both intervention and comparison facilities and at endline in intervention facilities only. These interviews collected information on CHEWs' experience offering implants services and on facilities' availability of commodities, protocols, and other service provision components.

To identify the proportion of CHEWs who met competency standards and the extent to which CHEWs observed recommended safety practices, support supervision teams directly observed CHEW provision of implants using an service provision standards checklist. The checklist contained both the standard counseling and clinical procedures that should be followed during the provision of implants. The performance of each observed CHEW was assessed against the standard. Supportive supervision also sought to understand the difficulties CHEWs encounter in the provision of services and recommendations for improvement.

Client exit interviews were conducted with a sample of clients who obtained implant insertion/removal on the day of the interview to assess their level of satisfaction with services obtained from the CHEWs (at the intervention sites) and non-CHEWs (at the comparison sites).

Percentage tables that showed the distribution of facilities, CHEWs, clients, and contraceptive method mix were generated and disaggregated by intervention and

Table 1. Distribution of sample by group, state, and type of facility

Health Facility characteristics	Cross River				Kaduna			
	Intervention (10)		Comparison (10)		Intervention (10)		Comparison (10)	
	n	%	n	%	n	%	n	%
I. Health Facilities								
Comprehensive Health Center	0	0%	0	0.0%	0	0.0%	1	10.0%
Primary Health Center	9	90.0%	9	90.0%	10	100.0%	7	70.0%
Primary Health Clinics ⁱ	0	0.0%	0	0.0%	0	0.0%	2	20.0%
Health Posts and Dispensaries	1	10.0%	1	10.0%	0	0.0%	0	0.0%

^{iv} The study avoided having both intervention and comparison sites in the same LGA to prevent LGA officials from deciding to introduce the intervention at non-intervention sites in the middle of the study, thus contaminating the study. Attempts were made to select non-intervention sites that were similar to the intervention sites.

^v The National Primary Health Care Development Agency originally classified a Primary Health Center as serving a population of 10,000–30,000 with at least 3 CHEWs, 6 Junior CHEWs, and 3 Nurses/Midwives; a Primary Health Clinic was classified as serving a population of less than 10,000 with at least 2 CHEWs and 4 Junior CHEWs. This classification has not changed over time despite facility expansions and/or population growth in catchment areas.

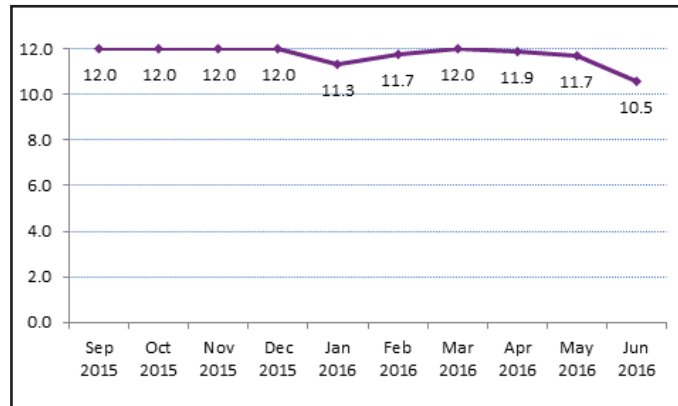
^{vi} At intervention sites with both CHEWs and non-CHEW staff providing implant services, exit interviews were conducted only with women who received implant services from CHEWs, and, likewise, supervision teams only observed provision of implant services by CHEWs.

comparison sites, as feasible. Descriptive statistical analyses of the FP method uptake at the 40 health facilities over time were performed to assess whether the intervention and comparison facilities were similar to each other during the two periods in terms of the uptake of condoms, pills, injections, implants, and IUDs. A series of different multivariate regression analyses were conducted to test if there were changes in the overall FP method mix across the intervention and comparison facilities, and if there was a difference between the pre-intervention and post-intervention periods with respect to mean monthly uptake of each of the five FP methods. Data were also collected on uptake of all implants, and the number provided specifically by CHEWs was recorded and analyzed. This analysis was performed to show the effect of training CHEWs to insert and remove implants.

Results

CHEWs inserted 1,900 implants in the 20 intervention facilities over a period of 12 months (July 2015-June 2016), generating 7,220 couple-years of protection (CYP). As a result of the intervention, all 40 trained CHEWs at intervention sites reported that they had received in-service training on general FP counseling, implant counseling, and implant service provision. Nearly all (88%, n=25) of these trained CHEWs reported providing implant removals as well as management of side-effects (96%). However, only 7 out of 40 CHEWs at intervention sites who received the in-service implants training said that they had inserted implants since their training. This percentage is much lower than expected, but difficult to explain through available data. It is possible that many of the trained CHEWs were assigned to provide other services at some point after they received the training.

Figure 1: Mean implant counseling competency score by calendar month

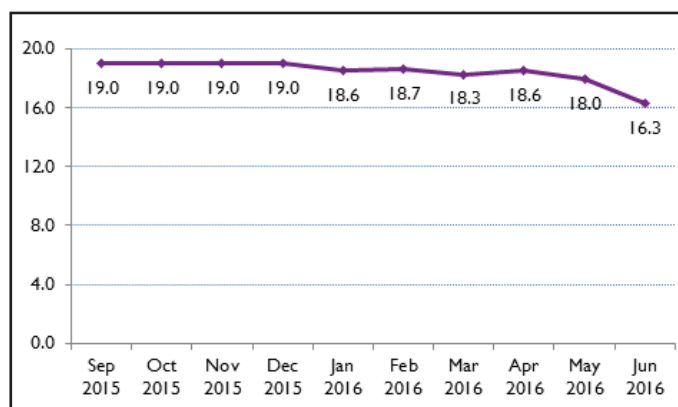


CHEWs performed well throughout the study period with respect to general FP counseling (data not shown). In addition, CHEWs reported that they felt confident providing services. Most CHEWs reported that their skills were “good” or “very good” and required “none” or “little” supervision to offer the service (data not shown). CHEWs demonstrated a high level of general contraceptive counseling competency that was maintained over 12 months during the post-training period. On average, there was also a high level of implant counseling competency through the period of observation. However, the implant counseling competency score on average declined at the end of the study (see Figure 1). Similarly, implant insertion competency was high at the beginning of the study, but appeared to

decline toward the end of the post-training period (see Figure 2). While it is possible that this is due to attrition of the most active and experienced providers, providing ongoing refresher training may be needed within a year after the initial training.

As stated previously, good quality, regular supervision is critical to ensure that providers have the skills and knowledge to provide quality FP services. At endline, all interviews with CHEWs at intervention sites revealed that they usually received supervision on some or all FP methods, most often from a Local Government Primary Health Care staff (data not shown). Most CHEWs reported that the supervisors observed service provision activities, reviewed registers and commodity supplies,

Figure 2: Mean implant insertion competency score by calendar month



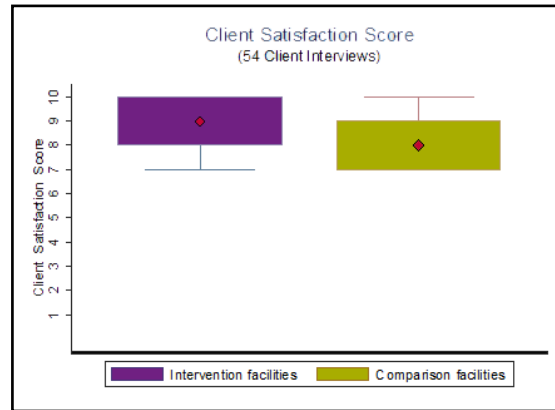
and occasionally provided on-the-job training. Importantly, CHEWs from intervention sites at endline received feedback either during or after each supervision visit. Almost all of the CHEWs who had received feedback reported to find the feedback useful (data not shown).

Clients were equally likely to be satisfied with implant services provided by a CHEW at intervention and comparison sites, showing that training did not have a strong effect on client satisfaction scale score (see Figure 3). Although clients in intervention sites were more likely to be satisfied with the privacy and ability/encouragement to ask additional questions, overall, there were few differences between intervention and non-intervention sites in client satisfaction with services, the information she was given, or the implant method that she received. Notably, clients were highly satisfied with the wait times, the cleanliness, and the cost of services they had received (data not shown).

CHEWs in both intervention and comparison sites in both states reported to have implants fully available in facilities at both baseline and endline (data not shown). Five CHEWs in intervention facilities reported at endline that they were not offering implants due to lack of trained staff to provide implants (data not shown). However, over one-third (36%) of clients in intervention sites mentioned that there was a shortage of one or more FP commodities at endline. Clients' reported lack of implants, and specifically, the rationale for this shortcoming, require a more thorough investigation.

A regression analysis of service statistics from all facilities showed that CHEWs provided a significantly greater mean monthly number of implants at intervention

Figure 3: Client satisfaction score, intervention and comparison facilities



sites (vs. comparison sites) from pre-intervention (April-June 2015) to post-intervention (April-June 2016; regression findings not shown). Figures 4 and 5 show this trend graphically, splitting the implant provision data by intervention and comparison facilities. In examining intervention vs. comparison facilities, it appears that intervention facilities, seen in

Figure 4, show an increasing and positive trend of CHEWs inserting implants, whereas in Figure 5, the number of implants inserted by CHEWs remains near zero. On average, the monthly mean number of the CHEW-inserted implants at the intervention facilities was higher by about six implants provided during the post-intervention period (data not shown). However, only 28% of trained

Figure 4: Implant provision in the 20 intervention facilities, April 2015-June 2016

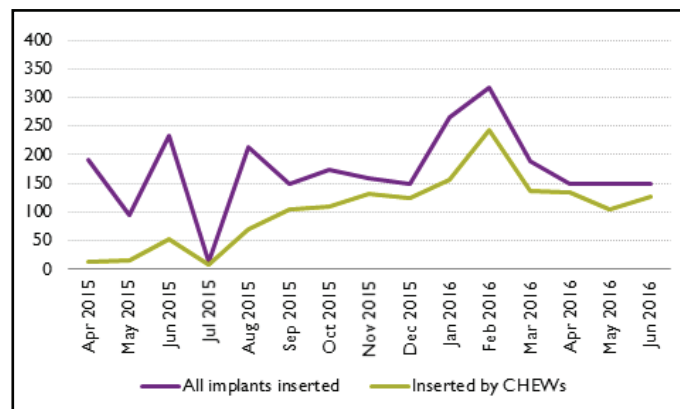


Figure 5: Implant provision in the 20 comparison facilities, April 2015-June 2016

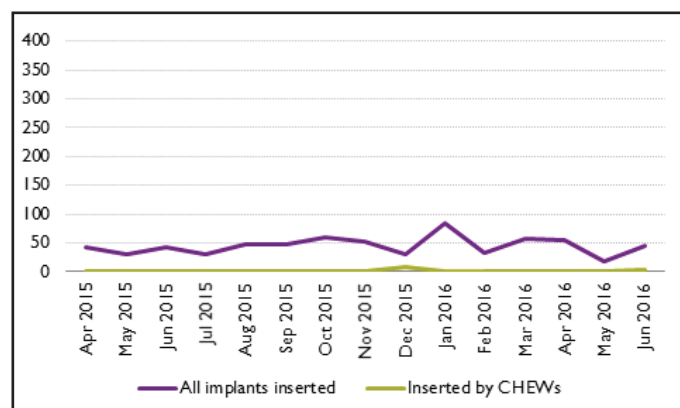
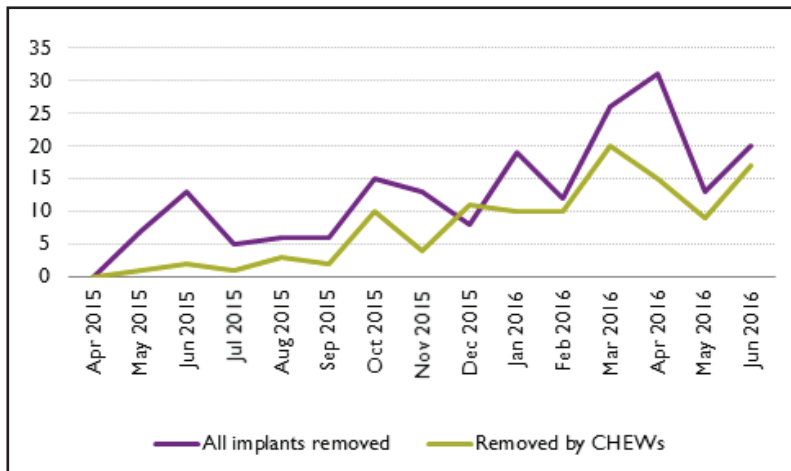


Figure 6: Implant removal in all 40 facilities (intervention and comparison), April 2015-June



CHEWs at endline reported that they were performing implant provision services (data not shown).

Multiple regression results, however, revealed that there was no overall increase in the number of implants provided at facility level by all staff over time, and there were no observed changes in the method mix, with the exception of a decrease in pill users (regression results not shown).

Figure 6 shows all implants removed and the number removed by CHEWs, which is again, a subset of former, in all 40 facilities over the 15-month period. Interestingly, trained CHEWs in intervention facilities seem to be carrying out most of the removals; perhaps they are recognized as “expert” in doing this procedure due to their recent training and experience.

Conclusions & Recommendations

These findings suggest that while task-sharing has been successfully implemented and a percentage of trained CHEWs have provided greater numbers of implants over time, the number of total implant clients is not increasing at facilities. It is likely that

there needs to be greater attention to demand generation activities, both within facilities in coordinating units (antenatal care, PMTCT, immunizations, etc.), and externally in communities served by the facilities, keeping in mind the need for volunteerism, informed choice, and equal promotion of all methods.

This study was designed to be comparable to results collected a study conducted by Jhpiego in Bauchi and Sokoto states.⁹ Results of the Jhpiego study are consistent with these findings. Both studies demonstrated improved or highly competent implant counseling skills, strong implant insertion skills by CHEWs, and improved client satisfaction from baseline to endline. Both studies noted a relatively low number of implant insertions per health facility per month throughout the study, attributing this to a lack of demand in the communities, who are more familiar with injectable contraceptives, pills, and condoms. Both studies concluded that supportive supervision is important to success in providing services and in maintaining quality assurance, highlighting the need for retraining and suggesting training of additional practitioners to increase the number of

available providers. Finally, CHEWs in both studies identified a lack of demand in the communities as a major barrier to providing services.

Policy change is an important first step in expanding access to contraceptive implants in Nigeria. However, it is not sufficient on its own to enable successful task-sharing of implants. Findings from this study point to the need to continue to support health system strengthening initiatives at health facilities including:

1. Greater community outreach to generate voluntary demand in the context of informed choice (which also serves to decrease the time for providers to complete their competency certification);
2. Close mentoring and supportive supervision for certifying and maintaining high-quality service provision and useful judicious application of the competency checklist during ongoing supportive supervision;
3. Training and re-training CHEWs to provide implant services;
4. Supply chain and commodity logistics support for ensuring availability of commodities at facility level;
5. Support for continued monitoring data collection and feedback on both implant insertions and removals; and
6. Advocacy initiatives to ensure the newly adopted task-sharing policy is scaled up appropriately in all Nigerian states.

In addition, decision-makers need data, particularly on costing, continuation of use, and effectiveness, before bringing task-sharing to scale. As noted during a 2016 DC-based stakeholder workshop on task-sharing, building consensus and obtaining buy-in from local governments and stakeholders throughout the testing and scale-up process is critical.³

Demonstrating that a health service, such as providing contraceptive implants, can be safely task-shared to less highly trained workers is crucial, but is only one step toward effective implementation at scale. As noted by Shaefer (2015), providers also need dedicated time, sufficient clients, supplies, supervision, and other system support, to maintain competency, confidence, and productivity.¹³

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Evidence To Action Project

1250 Connecticut Ave NW, Suite 475
Washington, DC 20037, USA
T: 202-775-1977
www.e2aproject.org
 @E2AProject

Pathfinder International

9 Galen Street, Suite 217
Watertown, MA 02472, USA
T: 617-924-7200
www.pathfinder.org
 @PathfinderInt

Pathfinder/Nigeria

Plot 35
Justice George Sowemimo Street
Asokoro, Abuja, Nigeria