

Community-Based Distribution of Injectable Contraceptives: Introduction Strategies in Four Sub-Saharan African Countries

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Improving access to family planning services and expanding method choice are two fundamental, proven strategies for increasing contraceptive prevalence in resource-poor settings.¹⁻⁴ Community-based family planning programs are designed to improve access by bringing services to hard-to-reach communities.^{5,6} Such services are typically delivered by community health workers who are trained in family planning but lack formal clinical credentials. Working outside the health facility, community health workers provide health education to promote family planning, distribute contraceptives and refer clients for clinic-based services. For decades, community-based distribution programs have been credited with expanding access to family planning services in otherwise underserved communities in Africa, Asia and Latin America.⁵

Despite the important contributions that community-based distribution programs have made to family planning service delivery in resource-poor settings, their full potential for expanding method choice has not been realized in Sub-Saharan Africa. Most notably, national policies in most countries permit community health workers to provide condoms and oral contraceptives, but not injectable contraceptives. This constraint seriously limits programs' responsiveness to clients' needs and preferences, particularly in Sub-Saharan Africa, where injectables are now the most popular modern method.⁷ Some health officials have been reluctant to approve community-based distribution of injectables because of doubts about lay workers' ability to maintain safety and quality standards when screening clients for medical eligibility, administering injections, disposing of used needles or delivering timely reinjections. Concerns have also been expressed about community health workers displacing clinicians and providing additional services that are beyond their qualifications.

However, global policy developments provide useful, new evidence on the appropriateness of community-based distribution of injectables. The World Health Organization (WHO) and the United States Agency for International Development (USAID) convened a technical consultation in June 2009 to review global scientific results and program experience related to community-based distribution programs. Consultation members reviewed relevant scientific literature, program documents and results from informant interviews pertaining to program experience in nine countries.⁸ Guided by the evidence, the consultation concluded:

"Given appropriate and competency-based training,

community health workers can screen clients effectively, provide DMPA (depot medroxyprogesterone acetate) injections safely and counsel on the side effects appropriately, demonstrating competence equivalent to facility-based providers of progestin-only injectables."⁹

This statement was subsequently endorsed by international associations representing nurses, midwives and obstetrician-gynecologists, as well as by the International Planned Parenthood Federation, Marie Stopes International, the United Nations Population Fund and the World Bank.

Given this increased global support and interest, decision makers now need practical guidance for initiating community-based distribution of injectables. This article documents firsthand observations made during the launch of community-based distribution initiatives in Uganda, Madagascar, Nigeria and Kenya. USAID supported these four programs through grants to FHI 360, an international nongovernmental organization (NGO) specializing in global health and development.

COUNTRY INITIATIVES

Uganda

Uganda's 2006 national survey showed that 18% of married women used modern contraceptives.¹⁰ Additionally, 41% had an unmet need for contraception; that is, they were sexually active, did not want to become pregnant and were not using a contraceptive method. Low use of contraceptives may be partially the result of limited access to health care facilities and services. DMPA is the most popular method in Uganda, relied on by 10% of married women; however, it is reported as the preferred method by 40% of users and by 55% of women who are not using a method currently but intend to in the future.¹⁰

Against this backdrop, the Ministry of Health, Save the Children and FHI 360 conducted a 2004–2005 pilot study¹¹ to assess the safety, quality and feasibility of adding DMPA to the existing community-based distribution family planning program, focusing on the cadre of community health workers in Nakasongola District who are supported by NGOs. This research, conducted with 777 women, confirmed that well-trained community health workers who are experienced in condom and pill provision can safely provide injectable contraceptives. Further, the study showed that women were equally satisfied with quality of care, whether they received DMPA from a community health worker or a facility-based clinician. The study re-

sults inspired the Ministry of Health to decide, in 2006, that community-based distribution of injectables should continue in Nakasongola and that the practice should be expanded to other areas.

In 2006, working under a waiver of the prior national policy that had limited provision of injectables to clinicians, FHI 360 continued its partnership with Save the Children to implement a community-based distribution program in Nakaseke and Luwero, two districts that are adjacent to Nakasongola. In 2007, services were further expanded to two public-sector community-based programs in Busia and Bugiri Districts. In the first 12 months of this expansion, 1,364 women accepted injectables from 44 trained community health workers; of these women, 30% were first-time users of the method.¹² NGOs in Kanungu and Mubende districts also added community-based distribution to their programming at that time, but data on client uptake were not obtained by FHI 360.

Throughout these phases, FHI 360 worked with Ugandan partners to advocate for community-based distribution of injectables. A national advisory committee was formed in 2006, and evidence-based promotional materials were developed and distributed to all districts nationwide in 2007. The project also identified and mobilized influential local “champions.” Typically, these were politicians who served as advocates, directing efforts to raise awareness and influence district-level decision making among local political and civil society leaders. The collective programmatic evidence derived from Uganda’s diverse field experiences influenced the Ministry of Health to issue a 2010 amendment to Uganda’s National Policy Guidelines and Service Standards for Sexual and Reproductive Health and Rights, thereby approving community health worker provision of injectables. Countrywide scale-up of these distribution programs continues as part of comprehensive community-based family planning programming, and the Ministry of Health is developing a national plan.

Madagascar

While the Ministry of Health and Family Planning was contemplating updates to its National Reproductive Health Norms and Procedures in 2006, international partners shared information about successful experiences with community-based distribution of injectables in Uganda, Latin America, Asia and elsewhere.⁷ The Ministry decided to include a provision in its revised national guidelines stating that trained community health workers could provide DMPA. Ministry authorities recognized the potential, through this innovation, to help reduce unmet need for contraception, which was estimated to be 24% among married women, while contraceptive prevalence was 18%.¹³ Before permitting broad-scale service implementation, however, authorities wanted evidence that community-based distribution of injectables could be successfully adapted to the Madagascar context. The Ministry thus collaborated with FHI 360 and three NGOs to operate services in 13 communities spanning four districts

where community health workers were already providing family planning services with support from the USAID-funded project, SanteNet. Following training, 61 community health workers began offering injectables, pills and condoms, and referring clients to the nearest health center for other methods. A subsequent evaluation revealed that 1,662 clients had accepted DMPA from a community health worker in the first seven months of service delivery. Of these, 41% were either using family planning for the first time or resuming use. All of the community health workers demonstrated knowledge of performance standards established in training. Clients reported high-quality services, nearly all intended to continue receiving DMPA from a community health worker, and most said they would recommend the service to a friend.¹⁴ Guided by these favorable findings, the Ministry collaborated with NGOs to scale up the pilot program. As of April 2010, some 428 community health workers supported by NGOs were providing DMPA in 27 of Madagascar’s 111 districts.

Nigeria

The Nigerian Federal Ministry of Health began reviewing evidence on community-based distribution of injectables in 2007. National authorities were seeking ways to increase contraceptive prevalence, which was slightly less than 10% among married women.¹⁵ With support from FHI 360, health authorities traveled to Uganda, in 2008, to view first-hand its community-based distribution program. The report of this study tour was disseminated to the Nigerian National Reproductive Health Working Group, which endorsed the formation of a national technical working group to guide the design and implementation of a similar project in Nigeria.

Community health extension workers implemented Nigeria’s initiative. This is the lowest cadre of trained medical professionals, who have at least two years’ training in basic curative and preventive health services. Ministry of Health officials were interested in testing the feasibility of extension workers’ providing injectable services. They chose two local government areas as pilot sites in Gombe State in northern Nigeria, where contraceptive prevalence among married women was 4.5%.¹⁵ The project’s local partner, the Association of Reproductive and Family Health, trained 30 community health extension workers. According to service statistics, these community workers provided 1,379 rural women with injectables from August to November 2009.

Satisfied with the results of the pilot program, Nigeria’s Federal Ministry of Health has taken steps to expand the service nationwide. In July 2012, the National Council on Health approved a recommendation from the Federal Minister of Health that allows community health workers to provide injectable contraceptives and encourages Nigeria’s state Ministries of Health to scale up this practice. With support from international partners, the Federal Ministry of Health is now revising national family planning/reproductive health policy guidelines and finalizing the family

planning training manual for community health workers. In addition, the Ministry of Health will provide technical assistance to states willing to offer community-based distribution of injectables.

Kenya

FHI 360 launched an advocacy campaign in 2006 to generate interest in community-based distribution of injectables within the Ministry of Health. The promotional efforts first targeted the national Division of Reproductive Health and later focused on professional medical associations and on regional- and district-level health officials. FHI 360 advisors shared evidence of successful community-based distribution programs of injectables elsewhere in Africa, noting that such initiatives were consistent with Kenya's strategy to advance community-level health care delivery. At that time, 32% of married women were using modern contraceptives, and 25% had an unmet need for family planning.¹⁶ In 2007, a 10-person delegation, including Ministry of Health managers, representatives from medical professional associations and international partners from NGOs, participated in a study tour of the Uganda program to learn more about its program implementation. Inspired by the delegation's positive experiences, national Ministry of Health officials agreed to conduct a pilot project in one district. A special project advisory committee was formed with a subset of members from the national Family Planning Working Group to guide project design and implementation.

To identify a suitable location for service launch, the Division of Reproductive Health teamed with FHI 360, in 2007, to conduct rapid assessments in six districts with community-based family planning programs. The Advisory Committee eventually chose Tharaka District, where community health workers were already providing oral contraceptives and condoms. The training of 31 health workers and the launch of service delivery took place in 2009; FHI 360 and the USAID-funded APHIA II project provided technical support. Between August 2009 and September 2010, a total of 832 clients received injectables from community health workers.¹⁷ Moreover, the percentage of women using any modern method tripled in the targeted catchment area once health workers began offering injectables.¹⁷ Armed with these results, the Division of Reproductive Health, the Division of Community Health Services and other stakeholders, including FHI 360, continue to advocate for a change in national family planning guidelines to allow community health workers to offer injectables along with pills and condoms.

LESSONS LEARNED

Advocating for Policy, Program and Community Support

Experience across the four countries revealed the importance of building relationships and sharing information with authorities responsible for decisions about health policy and resource allocation. FHI 360 technical advisors continually shared evidence and practical informa-

tion with family planning officials, and sought their input in an effort to build momentum and support. They met with national program managers and regulatory authorities, NGOs, professional medical associations, donors and international partners working in the health and family planning sectors. While specific advocacy activities and related timelines varied by country, the shared approach was to assess decision makers' priority concerns and information needs, and respond with documented programmatic experience and research-based evidence. Study tours were another highly useful mechanism for information sharing, allowing family planning program managers to observe operations in Uganda and consider the transferability of the innovation to their own contexts. Interestingly, the absence of supportive national policies did not necessarily preclude service introduction. Madagascar alone, at the time of service initiation, had a national policy permitting provision of injectable contraceptives by nonmedically trained health workers; government officials in Uganda, Kenya and Nigeria provided special waivers to conduct pilots.

Momentum in all four countries increased once formal steering committees were created to guide the planning and implementation of community-based distribution programs. Committee membership extended beyond family planning programmers to include leaders in health, population, social welfare and economic development. Additionally, generating the interest and involvement of local leaders was an important step in encouraging acceptance of this innovation in the communities where it was introduced. National-level family planning program managers traveled outside their country's capital to discuss initiatives with district and health center managers and community leaders.

Choosing the Setting

National-level health officials used data from rapid assessments to determine where the service was most needed and what existing in-country assets could be tapped. Information was collected on health facility access, staffing of health facilities, estimated unmet need for family planning, demand for injectables and the strength of existing community health worker programs. Program managers then chose the specific community-based distribution programs to which injectables would be added. Programs in Uganda and Madagascar incorporated community-based distribution of injectables primarily in NGO-supported programs where nonmedically trained agents were already delivering other family planning services. All country programs chose rural sites that had high unmet need for contraception and poor access to health facilities. Program managers then chose individual community members to provide injectables. They selected these managers on the basis of criteria like dynamism, intelligence, literacy, standing in the community and performance of past duties. All health workers had prior experience offering condoms and oral contraceptives.

Securing Resources

In all four countries, community-based distribution of injectables was added to an existing community-based family planning program; thus, systems were already in place for commodity management, supervision, referral and reporting. Countries sought additional funding for training, travel to permit enhanced supervision, and medical and nonmedical supplies like syringes, cotton, boxes for safe disposal of medical waste, backpacks, gumboots and umbrellas. With funding from USAID, FHI 360 gave all four countries financial support and technical assistance for start-up activities, including training design and implementation, program coordination, development of job aids (e.g., a laminated checklist) and monitoring tools, and advocacy. Resources were also obtained from other USAID-funded projects, such as SanteNet in Madagascar and APHIAPlus Eastern in Kenya. The national governments in all four countries paid for contraceptive commodities. Finally, public-sector health services and NGOs provided additional resources, such as staff time to train and supervise community health workers.

All four distribution initiatives followed existing procedures to compensate health workers for providing injectables. Community health workers in Uganda, Madagascar and Kenya were volunteers; only the program in Nigeria engaged a more highly trained, salaried cadre of health workers, although no additional money was provided in return for the added responsibility. In Madagascar, community health workers were permitted to charge clients a modest fee for service, equivalent to seven U.S. cents, consistent with the policy for providing other contraceptives. Health workers in all four countries received different combinations of in-kind gifts and equipment through the program, such as caps, t-shirts and calculators. These bonus items not only were useful, but also reportedly served as an incentive: Some agents reported feeling motivated by the recognition they received from both fellow community members and governmental authorities.

Training

All four initiatives gave health workers the knowledge, competence and confidence to offer injectables along with other family planning services. Training materials were originally developed in 2004, in Uganda, where FHI 360 had collaborated with Save the Children and a Ministry of Health training nurse to prepare a curriculum that included a pictorial counseling flipbook that could be used by low-literacy workers. Major topics included counseling, safe injection technique, infection prevention, reinjection schedules, record-keeping and commodity management. Instruction also focused on the use of a screening tool for assessing client eligibility for injectable contraceptives, consistent with WHO medical eligibility criteria. The Uganda materials were adapted for use in the three other country programs and beyond.

Family planning program managers assembled training teams that featured some combination of national, district

and NGO trainers. The aim was to minimize reliance on external technical assistance for training to promote program sustainability and capacity for expansion. In the initial pilot program in Madagascar, for example, two national program managers, both physicians, served as trainers, while FHI 360 provided technical support. Once services were expanded, programs relied on a training-of-trainer model: Instruction began by training district Ministry of Health trainers and continued by training community health workers.

Community health worker classroom training was followed by a clinical practicum in local health facilities that lasted one to four weeks. Practicums allowed health workers to apply the skills they learned during training; they also ensured that competency standards were met before health workers were certified to provide injections independently. Programs introduced checklists to support trainers as they observed and assessed community health workers' proficiency during the clinical practicum; these checklists were subsequently used to guide routine supervision. Trainers made special provisions to ensure that health workers had sufficient opportunity to practice giving injections under clinical supervision. For example, the Madagascar program produced radio spots to attract additional family planning clients to the clinics for training purposes during the practicum. When opportunities for supervised practice during group training were insufficient, the training team arranged for community health workers to practice under the direct supervision of health facility nurses until they had performed six observed injections using the correct technique. Despite concerns that lay workers would struggle to learn injection technique, they typically mastered this skill without difficulty. In fact, providing injections appeared to be no more challenging than counseling clients or keeping records.

Ensuring Quality

The four initiatives identified similar quality and safety priorities, consistent with internationally recognized standards for provision of injectables. These included: assurance of free choice of contraceptive method, compliance with medical eligibility criteria, safe injection technique with auto-disable syringes, safe disposal of medical waste, counseling on possible side effects, referrals for management of serious side effects and protection of client confidentiality. Health officials established performance expectations through service delivery guidelines that were introduced in training.

Supervision was the chief mechanism by which service quality was monitored and performance standards were reinforced. Public-sector clinicians and NGO staff had varying supervisory responsibilities; the same supervisory mechanisms that had been used to monitor and support the provision of other community-based family planning services were used to supervise injectable services. In some cases, nurses supervised community health workers when they visited health facilities monthly to submit reports and

replenish supplies. This was an opportunity for the clinic-based supervisor to assess knowledge and answer questions. Sometimes, community health workers provided family planning services in the health facility, creating an opportunity for the supervisor to monitor their actual performance. NGO supervisors were more apt to visit community health workers in their home communities. The original expectation that facility-based public-sector clinicians would supervise health workers in their home communities proved to be largely unrealistic. Typically, NGO supervisors lived in these communities, and they were not assigned the host of other responsibilities that supervisors in health facilities faced. Nonetheless, even these supervisors faced time and travel constraints that impeded their ability to maintain consistent contact with community-based distribution agents. To fill supervisory gaps in Uganda, some health workers were designated as leaders to provide peers with ad hoc guidance. In Kenya, nurses serving as community health extension workers supervised community health workers, consistent with the Ministry of Health's strategy for community-based services.

Commodity Management

All four countries capitalized on commodity management procedures that were already in place for family planning and health services. Community health workers received their contraceptive supplies from local health facilities that in turn obtained commodities from district-level depots, which were supplied by national warehouses. Maintaining consistent commodity supplies was a challenge across settings. Problems rarely originated with community health workers, but mostly occurred when health facilities did not have supplies that workers needed. When facilities lacked supplies, it was usually because of faulty forecasting, late requisitions or national shortages.

Supervisors supported community health workers in carrying out commodity management responsibilities. These supervisors were charged with facilitating collaboration between the community health workers, whom NGOs had deployed, and local health facilities, to ensure that the workers' supply needs were served. Supervisors used on-the-job coaching to reinforce health workers' ability to keep accurate stock records. In at least one country, the supporting NGO made sure that workers consistently had supplies by providing commodities that were unavailable at the health center. In some cases, such as when flooding made roads impassable, community health workers struggled to reach health facilities to obtain supplies. One solution that the Madagascar pilot program developed was to allot larger stocks to community health workers prior to the rainy season. Finally, in three of the country programs, FHI 360 worked with district- and national-level health managers to speed supply procurement and encourage district health officers to make timely requests to meet the increasing demand for injectables. One program benefited from short-term USAID-funded technical assistance to reinforce logistics management skills and procedures.

Process and Outcome Documentation

The community-based distribution of injectables programs highlighted in this article were largely viewed as introductory; national family planning program managers were interested in program data that reflected programs' feasibility, acceptability and impact. The four country initiatives used different monitoring and evaluation approaches to respond to specific informational needs. Managers in Uganda and Madagascar initially launched programs as research studies. In the initial phase of the Uganda program, intervention success was measured in terms of three-month reinjection rates, user satisfaction, client knowledge of key information about injectables, and comparisons of the incidence of morbidity between community health worker- and clinic-provided injections.¹¹ In Madagascar, the evaluation team examined service uptake, three-month reinjection rates, user satisfaction, and health workers' job knowledge and satisfaction.¹⁴

Program managers in all four countries used community health workers' reporting procedures to routinely monitor services by reviewing client registers, logs of supply inventories, monthly activity reports and individual client records. Managers examined program impact in terms of the number of individuals who accepted services, the percentage of acceptors who were new family planning users and the rates of reinjection. Other useful monitoring indicators included the proportion of trained community health workers who continued offering injectables as well as the pill and condoms. Data on services delivered by community health workers were eventually incorporated into the service statistics of the affiliated health center and were routinely entered into national health information management systems.

Despite efforts to keep reporting requirements simple, most community health workers in the four pilot initiatives struggled to meet monthly requirements. In two countries, for instance, health workers collected information in their own notebooks because they found reporting forms too unwieldy. Many found it difficult to complete the array of seemingly redundant forms. Because procedures were modified only slightly when the distribution of injectables was added, it is likely that preexisting difficulties were merely brought to light as health workers' performance was scrutinized.

Conclusions for Future Programs

The four highlighted initiatives reveal how the process of introducing community-based distribution of injectables was adapted to different countries. Such adaptation sets the stage for program expansion and replication elsewhere. Differences across the four settings show the flexibility and broad relevance of this kind of distribution program in Sub-Saharan Africa. However, some common preconditions were met in each of the four countries: The provision of injectables was added to pre-existing community-based family planning programs, and only a subset of community health workers who satisfied specific criteria

were trained. A set of common challenges emerged from the experiences, including limitations in clinicians' availability to supervise health workers, problems ensuring the timely resupply of commodities and reporting difficulties. Experience from the four programs documented creative solutions to overcome these challenges, many of which are inherent to low-resource health systems.

Even though the featured programs were delivered on a relatively small scale, each was designed to produce evidence relevant to decision making about the incorporation of community-based distribution of injectables into routine family planning programming. With eventual scale-up in mind, interventions were kept as simple and low-cost as possible, and services were implemented within existing health infrastructures. To build the capacity to maintain and expand these services, introductory strategies maximized the involvement of existing local program partners, such as public-sector trainers and local NGOs. Future research examining scale-up processes and outcomes would make a valuable contribution to the evidence base.

Program experiences are presented with a caveat: These four country initiatives were launched with external technical support and backed by donor resources. Support from NGOs, which was essential to programs' success in Madagascar and Uganda, partially depended on external funding. Nonetheless, in each case, the ministry of health and other in-country partners assumed increasing responsibility for the program. Countries could likely launch community-based distribution of injectables initiatives with far less external technical support, particularly if they capitalized on experiences of other countries and existing resources like training curricula, monitoring tools and advocacy strategies.

Community-based distribution of injectables is an innovation that deserves consideration by decision makers who are seeking measures to strengthen family planning services. This is especially true in Sub-Saharan Africa, where injectables dominate the contraceptive method mix, and the majority of women in need lack convenient access to clinic services.^{7,18} Decision makers in underserved areas that lack community-based distribution services, or where services are weak, may want to consider investing or re-investing in community outreach initiatives that include injectables in the method mix, to improve access to family planning services and expand method choice.

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