



**Addressing Unmet Need
for Family Planning
in Africa**

Long-Acting and Permanent Methods

The Case for Long-Acting and Permanent Methods

All individuals and couples have a basic human right to decide freely and responsibly the number, spacing, and timing of their children. Fulfilling this right is an important intervention for improving maternal and child health, preventing HIV infections, and improving the overall well-being of entire families. Yet, only a small proportion of women in Africa who want to space or limit their pregnancies are using any form of family planning. Among those who are using contraception, most are using short-acting methods, such as oral contraceptives and injectables.

Women and couples who want safe and effective protection against pregnancy would benefit from access to more contraceptive choices, including long-acting and permanent methods (LAPMs). LAPMs are convenient for users and effectively prevent pregnancy. They are also cost-effective for programs over time, can result in substantial cost savings for governments, and contribute directly to reaching national and international health goals. Despite these advantages, LAPMs remain a relatively small, and sometimes missing, component of many national reproductive health and family planning programs.

Status of family planning

Contraceptive use has increased worldwide over the last decade. Yet, Africa—like many other regions of the developing world—continues to have a high unmet need for family planning. Approximately 25 percent of women and couples in sub-Saharan Africa who want to space or limit their births are not using any form of contraception.¹ More than half of the people in Africa are younger than 25 years old, so unmet need is only expected to increase as these individuals enter their reproductive years.²

Over time, the use of LAPMs has not kept pace with that of short-acting methods, such as oral contraceptives and injectables. Data from demographic and health surveys from four sub-Saharan countries show that the proportion of women currently using LAPMs is significantly lower than the proportion using short-acting methods. In each of the four countries, the use of LAPMs has either stagnated or declined over the past two decades (Figure 1). In many countries in the region, fewer than 5 percent of women who are using contraception are using an LAPM.³

Women and couples who want safe and effective protection against pregnancy would benefit from access to more contraceptive choices, including LAPMs.

Evidence suggests a substantial unmet need for LAPMs in sub-

Saharan Africa. A discrepancy exists between the proportion of women who wish to stop having children and the proportion who are using an LAPM. Data from demographic and health surveys conducted in sub-Saharan Africa between 2003 and 2005 show that more than 20 percent of women in nine of the 11 countries surveyed do not want any more children. However, in each of the nine countries, fewer than 7 percent of the women are using an LAPM (Figure 2). Although short-acting methods provide contraceptive coverage for many women who do not want more children, these women are still entitled to a choice of contraceptive methods. An LAPM may be a good option for some of them, given their reproductive intentions, but they may not be using one because of lack of knowledge or access.

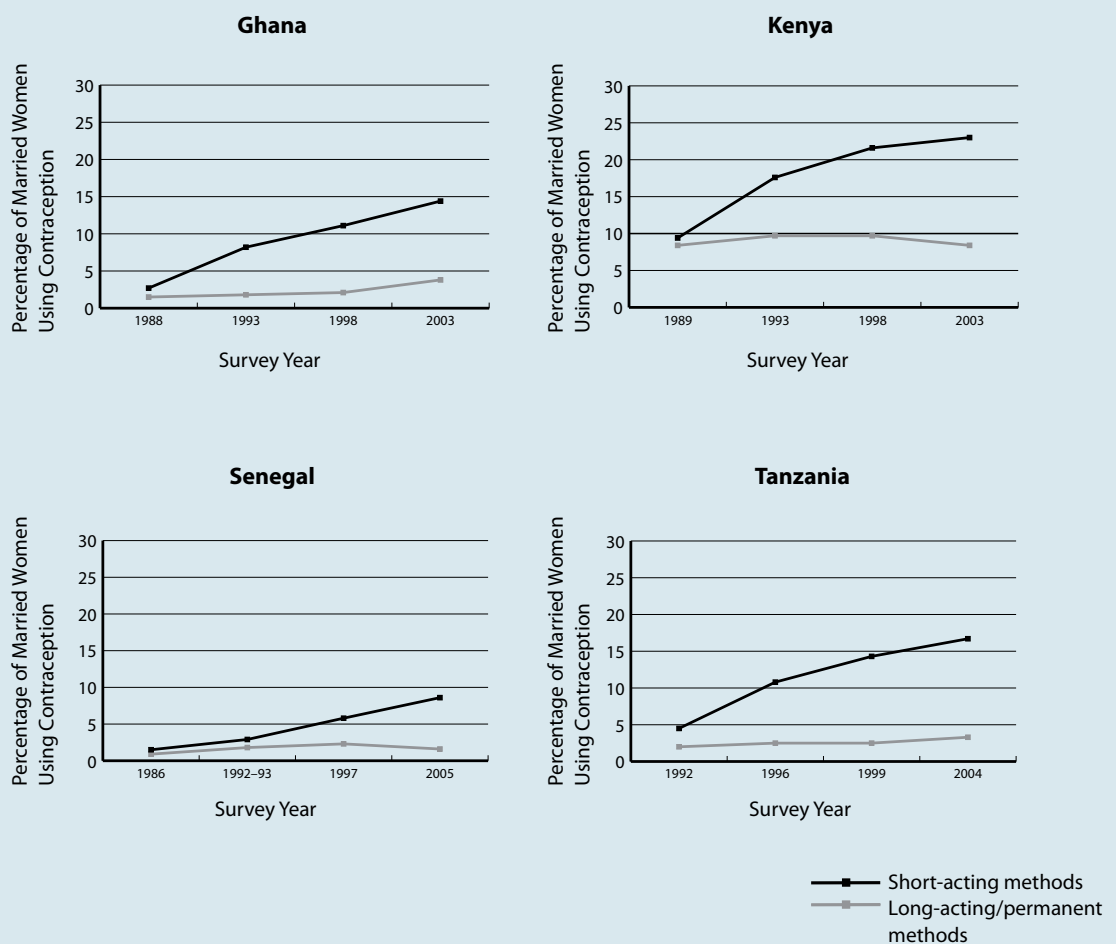
Need for spacing, limiting, or delaying births

Timing and spacing pregnancies is necessary for improving the outcomes of pregnancy and childbirth for both mothers and their children. Harmful outcomes can be avoided if a woman waits at least two years between the birth of a child and becoming pregnant again.⁴ Although women in sub-Saharan Africa report that they prefer to space their births by more than two years,

most births in the region are still spaced closer than that.⁵ Better availability of family planning services, including long-acting, reversible methods (i.e., intrauterine devices and implants), would fulfill the need for **healthier timing and spacing of pregnancies**.

Permanent methods of family planning, as well as long-acting methods, would meet the need of individuals and couples who want no more children. A woman in Africa gives birth, on average, to five or six children in her lifetime.⁶ As health conditions improve and rates of child mortality decline in Africa, it is expected that more couples will choose to have smaller families.⁷

Figure 1. Contraceptive Use in Four Countries in Sub-Saharan Africa: Short-Acting versus Long-Acting and Permanent Methods



Source: ORC Macro. *MEASURE DHS STATcompiler*. Available: <http://www.measuredhs.com>.

Note: The trends in this figure are based on data from demographic and health surveys of married women ages 15 to 49 years. Long-acting and permanent methods include implants, the intrauterine device, female sterilization, and vasectomy. Short-acting methods include all other modern methods of contraception.

Women in sub-Saharan Africa are waiting longer to marry. For instance, the rate of teenage marriage has decreased in Niger by 14 percent over the last two decades.⁸ Sexually active young women who want to delay pregnancy until after marriage may want long-term, reversible protection against pregnancy. Protecting young women from unintended pregnancies will also protect their health. Women under the age of 20 are at least twice as likely as older women to die during childbirth.⁹

Women who are not satisfied with short-acting methods but still wish to avoid pregnancy need alternative family planning choices. In developing countries, 20 percent to 30 percent of women who use oral contraceptives or injectables stop within two years of starting because of side effects or other health concerns.¹⁰ Many of these women could benefit from switching to an LAPM.

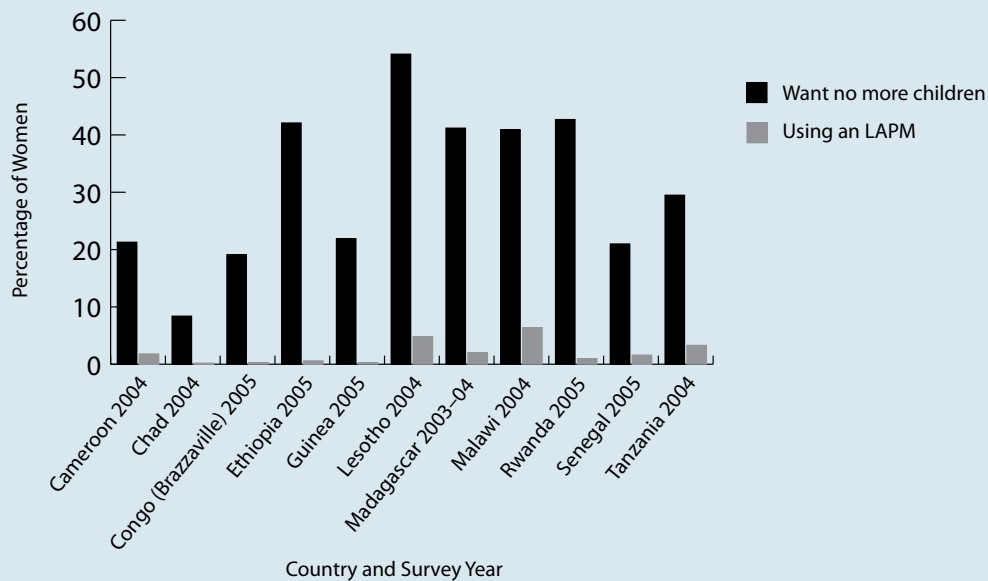
Major challenges to providing long-acting and permanent methods

Policy-makers and program managers are sometimes reluctant to make LAPMs part of the mix of contraceptive methods because of perceived cost barriers. As a result, the lack of availability of commodities, of equipment and supplies, and of opportunities to train providers is a persistent barrier to the use of LAPMs in some areas of sub-Saharan Africa. Even when programs provide LAPMs, stock-outs of the necessary commodities or equipment can be problematic.

Limited **access to LAPMs remains a problem.** Short-acting methods are becoming increasingly available through commercial outlets and community-based distribution, especially in rural areas where most people live. However, the provision of LAPMs is often confined to urban facilities. Distance to clinics and fees for services can make it difficult to obtain services.

Even when trained providers are available, medical barriers inhibit access. Providers may not provide LAPMs to their clients because of unnecessary or outdated restrictions, such as age or the number of children a woman has. They may not be familiar with the latest evidence and so may unintentionally deny a client an LAPM for inappropriate medical reasons. Or, they may not offer comprehensive information about all methods during counseling, which limits the ability of a client to make an informed contraceptive choice.

Figure 2. Unmet Need for Long-Acting and Permanent Methods in Sub-Saharan Africa



Source: ORC Macro. *MEASURE DHS STATcompiler*. Available: <http://www.measuredhs.com>.

Note: Unmet need for long-acting and permanent methods was determined by subtracting the percentage of women who are using a long-acting or permanent method from the percentage of women who report wanting no more children. All results are from demographic and health surveys conducted between 2003 and 2005 for married women ages 15 to 49 years.



Many **potential clients in sub-Saharan Africa lack information** or have misconceptions about LAPMs. Even in countries where most people know about family planning, fewer people have knowledge of the intrauterine device and vasectomy than of other methods.¹¹ Myths and misconceptions are also widespread for these methods.¹²

Prospect of change

Providing women and couples access to a range of contraceptive choices, including LAPMs, protects their human rights and benefits public health. Strengthening LAPM services in Africa will also meet individual needs while contributing to more sustainable national programs for reproductive health and family planning.

Although obstacles to providing LAPMs in Africa persist, many of these **challenges can be overcome**. To reach this end, policy-makers and program managers must promote an enabling environment through evidence-based policies and guidelines, improved provision of services, and the education of health providers, communities, and individuals.

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The Benefits of Long-Acting and Permanent Methods

The Benefits of Long-Acting and Permanent Methods

Long-acting and permanent methods (LAPMs) of contraception offer an untapped opportunity to meet the needs of a variety of people. They offer individuals and couples advantages that other methods of family planning do not, and their provision gives women who want to space or limit their pregnancies more choices. Use of LAPMs can also improve the health and well-being of entire families in several important ways.

Addressing diverse needs

For women and couples who want to delay or space their pregnancies, implants and intrauterine devices (IUDs) offer long-term effectiveness and reversibility. These reversible LAPMs are effective for three to 12 years,¹ depending on which method is chosen. Once either device is removed, a woman's fertility returns almost immediately. Implants and IUDs are also options for individuals and couples who want no more children. In addition, female sterilization and vasectomy effectively prevent pregnancies throughout the reproductive years.

At least 15 percent of all couples worldwide choose a method of family planning that men actively participate in using, such as condoms, withdrawal, periodic abstinence, or vasectomy.²

For men who have achieved their desired family size, vasectomy is the only method that offers highly effective, permanent protection from unintended pregnancies. The procedure is simpler and safer than female sterilization. It generally takes 15 minutes or less when performed by a trained surgeon, is almost painless, and is usually not complicated.³

For the young people of Africa who are delaying marriage and parenthood, reversible LAPMs are safe and suitable options. Because they do not require any action on the part of a user, implants and IUDs are almost always used correctly, and they rarely fail. Pregnant adolescents are also at higher risk than other women of pregnancy-induced hypertension, anemia, and prolonged or obstructed labor.⁴ So, young people who choose reversible LAPMs are also protecting themselves against these potential complications.

LAPMs are an option for women and couples who are living with HIV or AIDS and want to prevent unintended pregnancies.

Reversible LAPMs are an alternative for women who discontinue

other methods of family planning but still want to avoid pregnancy. A woman who stops using short-acting hormonal methods because of estrogen-related side effects may prefer an IUD or implant. A woman using a short-acting method might also consider switching to an LAPM if she has trouble returning to the clinic for resupply, has difficulty using her method correctly and consistently, or wants to prevent pregnancy for a longer period.

Because they either do not contain hormones or contain only progestin, LAPMs can be used by lactating women immediately or soon after childbirth without affecting their milk supply. A woman can have an IUD inserted within the first 48 hours after giving birth. Or, she can safely undergo female sterilization within the first week after giving birth if she is certain she does not want any more children. Women who are breastfeeding can also safely initiate implants as soon as six weeks postpartum.⁵

LAPMs are an option for women and couples who are living with HIV or AIDS and want to prevent unintended pregnancies. IUDs, implants, and female sterilization can all be used by women with HIV or AIDS or at high risk of HIV. Vasectomy can be used by any man, regardless of his HIV status.

Offering unique advantages

LAPMs are the most effective methods for preventing pregnancies. Most modern methods of family planning are highly effective when used correctly and consistently during every act of sexual intercourse. In typical use, when people occasionally forget to use a method or use it incorrectly, many contraceptive methods are not as effective. During one year of typical use, **LAPMs are between three and 60 times more effective than most short-acting methods** (Table 1).

Table 1. Pregnancy Rates During One Year of Typical Use

Family planning method	Method type	Pregnancy rate (%)
Oral contraceptives	Short-acting	8.0
Injectables	Short-acting	3.0
Copper intrauterine device	Long-acting	0.8
Female sterilization	Permanent	0.5
Vasectomy	Permanent	0.15
Implants	Long-acting	0.05

Source: World Health Organization/Department of Reproductive Health and Research (WHO), Johns Hopkins Bloomberg School of Public Health/Center for Communication Programs/INFO Project (CCP). *Family Planning: A Global Handbook for Providers*. Baltimore, MD and Geneva: CCP and WHO, 2007.

LAPMs are convenient for users. Women who use oral contraceptives must remember to take their pills each day. Likewise, injectable users must have reinjections every one to three months, depending on the type of injectable they are using. Resupply often requires travel to a clinic, and the timing of clinic visits is critical for preventing pregnancies. LAPMs require almost no attention on the part of the user after they are initiated, and their effectiveness is not dependent on daily or monthly action.

LAPMs can be the most cost-effective option for users over time. Oral contraceptives and injectables may at first appear to be lower-cost options, but their cumulative costs due to return visits and resupply can be surprisingly high. On the other hand, LAPMs may have a higher one-time start-up cost, depending on the type of facility providing them, but are usually less expensive over time.

LAPMs can be the most cost-effective option for users over time.

People who use LAPMs are satisfied. In Kenya, more than 85 percent of women who choose the IUD⁶ and approximately 97 percent of women who choose female sterilization⁷ report being satisfied with their method. In both Nigeria and Zimbabwe, at least 96 percent of women using implants have said they are satisfied or very satisfied with their choice.⁸

Very few medical conditions limit LAPM use. No medical condition should restrict an individual's eligibility for vasectomy or female sterilization. Breast cancer is one of only a few medical conditions that makes a woman ineligible for implants. Certain conditions prevent initiation of the IUD. For example, the World Health Organization recommends that a woman with gonorrhea or a chlamydial infection should not begin using an IUD until her infection has been cured. However, like other LAPMs, the IUD is a safe option for most healthy women.⁹

LAPMs offer noncontraceptive health benefits. Implants and female sterilization protect against ovarian cancer, and use of an IUD or implant may lower a woman's risk of endometrial cancer. Use of an implant also decreases a woman's risk of anemia and reduces the amount of bleeding, pain, and cramps typically associated with menstruation.¹⁰

Benefiting family health and well-being

The use of LAPMs can improve maternal and child health. Healthy timing and spacing of births reduces the chance that a mother will become sick or die from complications related to pregnancy, unsafe abortion, or childbirth. When pregnancies are spaced too close together, babies can be born too early and too small, making them more likely to die before the age of five. Women are at higher risk of developing anemia, rupturing the sac of water surrounding the baby before the baby is ready to be born, or dying during childbirth. Spacing pregnancies also allows children to experience the substantial health benefits of breastfeeding for a full two years.¹¹

Smaller families can invest more money in the health, nutrition, and education of each of their children. Women who decide how many children they would like to have and how far apart they would like to space them are also empowered. They have more opportunities to work, be educated, and participate in other activities.

When one or more parents are living with HIV or AIDS, LAPMs can provide highly effective protection from unwanted pregnancies and, thus, mother-to-child transmission of HIV.

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The Role of Long-Acting and Permanent Methods in National Programs

Long-acting and permanent methods (LAPMs) of contraception are vital to the overall success of reproductive health and family planning programs. Although programs should always strive to address unmet need for family planning, an increase in contraceptive use is not the only measure of a successful program. Successful programs also fulfill individual preferences, promote correct and continuing use of family planning, provide cost-effective and sustainable methods, and reach long-term national and international health goals. LAPMs have distinctive attributes that help achieve all of these goals.

Responding to individual needs

Providing a range of methods, including LAPMs, gives clients more choices and helps ensure continuation. When multiple methods are available, most people who are dissatisfied with one method can switch easily to another method to avoid the risk of an unintended pregnancy. Women who have more contraceptive choices are more likely to start using a method of family planning, be satisfied with their choice, and continue using their method until they no longer wish to prevent pregnancy.¹

Contraceptive continuation is becoming an increasingly important indicator of client satisfaction and quality of care. **Continuation rates appear to be substantially higher among women who use reversible LAPMs**, such as implants or the intrauterine device (IUD), than among women who use other methods. In Africa, research studies suggest that approximately 80 percent of women who choose the IUD—and an even higher percentage of women who choose implants—continue using the methods for at least one year.^{2,3,4,5} In contrast, data from surveys in some developing countries suggest that only 60 percent to 70 percent of women who choose oral contraceptives or injectables are still using them after one year.⁶ While individuals can be extremely satisfied with reversible LAPMs, it is essential that programs provide ongoing services to clients wishing to discontinue or switch methods.

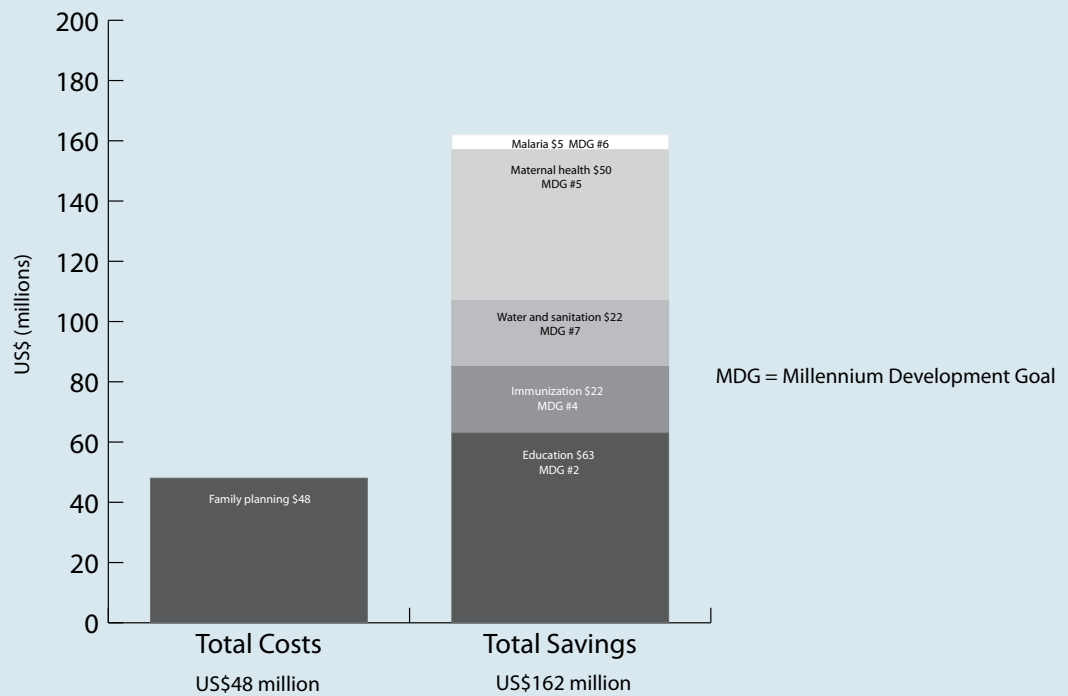
Contributing to the sustainability of programs

LAPMs are cost-effective for programs over time. When compared with the use of other methods, use of LAPMs results in fewer unintended pregnancies and fewer clinic visits. This eases the burden on already overextended health systems and providers. If used for at least three years, the IUD, vasectomy, and implants are considered the three most cost-effective methods when all direct medical costs associated with the methods, side effects, and unintended pregnancies are taken into account.⁷

In each country in sub-Saharan Africa, millions of dollars could be saved by addressing unmet need for spacing and limiting births. For example, investing in family planning, including LAPMs, is an economical way to meet the Millennium Development Goals. If enough money is invested in family planning to fulfill all unmet need, then an average of three times that amount could be saved on meeting five different Millennium Development Goals (Figure 1).

Investing in family planning, including LAPMs, is an economical way to meet the Millennium Development Goals.

Figure 1. Average Cost Savings of Investing in Family Planning



Adapted from: U.S. Agency for International Development (USAID). *Achieving the MDGs: The Contribution of Family Planning*. Washington, DC: USAID Health Policy Initiative, 2006.

Note: If sub-Saharan countries each invested an average of US\$48 million to fulfill unmet need for family planning, then an average of US\$162 million could be saved on meeting five different Millennium Development Goals by 2015. These numbers were obtained by averaging estimated costs and savings from 16 sub-Saharan countries. The costs of fulfilling unmet need for family planning ranged from US\$5 million in Chad to US\$140 million in Nigeria. The savings in meeting development goals ranged from US\$25 million in Chad to US\$408 million in Uganda.

Reaching national health goals

Increased use of LAPMs is essential for preventing unintended pregnancies. In Kenya alone, if just one-quarter of oral contraceptive users chose implants instead, more than 26,000 extra unintended pregnancies could be averted in a five-year period.⁸

Using family planning to meet the need for spacing and limiting births has the potential to prevent thousands of cases of maternal mortality over the next decade. The risk that a woman will die as a result of pregnancy, childbirth, or unsafe abortion is approximately one in 16 in sub-Saharan Africa. The country-specific risk of maternal death is as high as one in seven women in Angola, Malawi, and Niger.⁹

Spacing and limiting births also has the potential to prevent hundreds of thousands of child deaths. In each of 16 sub-Saharan countries studied, between 72,000 and 1.1 million child deaths are expected to be averted over the next decade if all women who want to space or limit their births succeed.¹⁰

LAPM use is part of an important, but often overlooked, strategy for preventing mother-to-child transmission of HIV. Meeting unmet need for family planning among HIV-infected women who do not want to become pregnant is at least as cost-effective as the traditional strategy of HIV counseling and testing coupled with provision of antiretroviral drugs like nevirapine. The use of

family planning is already preventing the birth of an estimated 173,000 HIV-infected infants each year in sub-Saharan Africa.¹¹

Meeting international health and development commitments

African countries have made several important international commitments to improve the sexual and reproductive health and rights of all of their people. LAPMs have a critical role in meeting these international goals.

Every country in the world and every leading developmental institution has agreed to meet the Millennium Development Goals (Table 1). But many developing countries, including those in sub-Saharan Africa, are not on track to reach them by 2015. Investing in family planning, including LAPMs, would contribute directly or indirectly to achieving all eight goals.

Table 1. Millennium Development Goals

- 1: Eradicate extreme poverty and hunger
- 2: Achieve universal primary education
- 3: Promote gender equality and empower women
- 4: Reduce child mortality
- 5: Improve maternal health
- 6: Combat HIV/AIDS, malaria, and other diseases
- 7: Ensure environmental sustainability
- 8: Develop a global partnership for development

In 2004, the World Health Organization Africa Regional Office developed a framework for repositioning family planning. LAPMs are an important component of this framework, which was developed to help national programs improve maternal and child health and achieve the health-related Millennium Development Goals. Forty-six African countries are committed to this plan.¹²

African countries have also agreed to the Cairo Programme of Action, the Maputo Plan of Action, and the Bamako Initiative. Promoting access to a full range of reproductive health services, which include LAPMs, and strengthening the capacity of national programs to provide high-quality reproductive health and family planning services are central to each of these commitments.

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Complex challenges hinder the availability, access, and acceptability of long-acting and permanent methods (LAPMs) of contraception in Africa, but these challenges can be overcome. Programs in low-resource settings have demonstrated that when LAPMs are effectively introduced or revitalized, women and men will use them. National efforts have incorporated both traditional and innovative approaches to address key barriers, including responding to concerns about policies, training midlevel providers to provide clinical contraceptives, and launching media campaigns to increase awareness of LAPMs. However, the success of these endeavors has been limited. The continued development, evaluation, documentation, and refinement of effective evidence-based approaches will be essential for improving LAPM provision in the region.

Create a supportive policy environment

Adopting new policies or updating existing ones can increase access to LAPMs. To succeed, policies must also be translated into evidence-based guidelines and protocols to reduce the barriers women and couples might face in obtaining quality services.

Mali was among the first African countries to obtain regulatory approval for and to introduce Norplant without replicating a long and costly clinical trial. It was also among the first to allow counseled adolescents to use the method. The number of women using implants in Mali increased from fewer than 3,000 in 1987 to more than 10,000 in 2001.¹

The Kenya Ministry of Health and its partners revised the *Kenya Family Planning Guidelines for Service Providers* to reflect recommendations issued by the World Health Organization in 2004. The new guidelines were used to orient providers in Western and Coast Provinces on the expanded eligibility criteria for use of the intrauterine device (IUD). In part owing to this change, the number of new IUD acceptors in AMKENI-supported facilities in these provinces increased from 151 in the first quarter of 2003 to 373 in the fourth quarter of 2005.²

Programs in low-resource settings have demonstrated that when LAPMs are effectively introduced or revitalized, women and men will use them.

Ensure contraceptive security

A steady and reliable supply of commodities and equipment is vital so that programs can meet existing and emerging demand for all family planning services, including LAPMs. Ensuring that LAPMs appear on lists of essential drugs can also facilitate in-country registration of new contraceptives, which can improve availability.

The governments of Kenya and Tanzania are among those that have shifted from in-kind donor contributions to government-managed financing and procurement of contraceptives. In 2005, the government of Tanzania established a line item in their annual budget for contraceptive procurement. That same year, implants were included on the list of commodities procured.³

All drugs considered necessary for a basic health care system are included on the *World Health Organization Model List of Essential Medicines*. In 2007, two-rod levonorgestrel-releasing implants such as Jadelle were added to the list, which already included IUDs. The government of Kenya approved Jadelle in 2003, well before it was included on the international list of essential medicines.

The *Strategic Pathway to Reproductive Health Commodity Security* has helped low-resource countries assess their contraceptive security and develop responsive approaches for creating and maintaining it. Madagascar is among a group of African countries that has already used this tool to develop a new strategy for financing contraceptives, including LAPMs.⁴

Expand services in rural areas

Expanded availability of LAPMs is essential for improving access to a range of family planning methods and services. Several efforts have been made to increase rural women's access to LAPMs by addressing restricted mobility, inadequate information about family planning, and lack of trained personnel as doctors migrate from rural to urban areas for better wages and opportunities.

In 2004, Save the Children USA trained community-based agents in Guinea to deliver information about the IUD and to refer interested clients to available IUD services in Mandiana District. Providers in two rural health centers and one urban facility were also trained on IUD insertion and removal. After the intervention, providers reported that 85 percent of referrals for IUD services were coming from community agents. The number of IUDs inserted in the study area increased more than five-fold (from 13 in the six months before the intervention to 73 in the six months after).⁵

Through the CHOICE Initiative, Marie Stopes International operates mobile teams of LAPM providers in countries such as Zimbabwe, Kenya, Tanzania, and Madagascar. The teams travel in fully equipped vehicles and offer free LAPM services at Ministry of Health posts in rural areas. Because simple technologies are used to give anesthesia, midlevel providers can perform all of the services. In 2006, Marie Stopes Tanzania was operating 19 static centers with more than 600 outreach sites. More than 30,000 implants were provided and more than 47,000 female sterilizations performed.⁶

Maintain a pool of trained providers

To address the lack of skilled LAPM providers in Africa, core groups of health care providers must be adequately trained on providing services and sustaining their skills. Paraprofessionals are an important group for counseling and referring clients, especially outside major urban centers. Initial and ongoing training, as well as continued support and supervision, are essential for the provision of high-quality services.

Paraprofessionals are an important group for counseling and referring clients, especially outside major urban centers.

The Guatemala Ministry of Health trained and certified professional nurses and nurse auxiliaries to provide IUD services at health centers and health posts in nine rural health areas. Between 2003 and 2004, 90 health providers completed the training and inserted 722 IUDs. The project increased the overall number of IUD services provided by the participating health facilities.⁷

Between 1994 and 2004, EngenderHealth trained more than 300 teams of doctors and nurses in Ghana to perform female sterilization. The project also focused on establishing a sustainable system of training and supervision in all participating facilities. During the project, the number of facilities providing female sterilization nearly tripled. More than 27,000 women chose the procedure.⁸

Provide people with accurate information

Increasing awareness of LAPMs and addressing common myths and misconceptions about the methods can improve acceptability and create demand for services. Projects have disseminated accurate information about LAPMs in various ways, including through television, radio, printed materials, community meetings, and peer-to-peer interactions.

In 2006, the ACQUIRE Project and the Kenya Ministry of Health launched a multimedia campaign and accompanying outreach activities to address common myths and misconceptions about the IUD in Kisii District. The campaign featured radio advertisements and interviews, posters and brochures, and satisfied clients who challenged negative perceptions and provided accurate information about the IUD. Between 2005 and 2006, awareness of the IUD improved, and uptake of the method more than doubled in the district. Total LAPM use also increased by 27 percent.⁹

Engage the private sector

Expanding the role of the private sector—which includes both nongovernmental organizations and the commercial sector—can enhance consumer choice by increasing the number of available sources of LAPMs. The private sector may be an especially important alternate source of contraceptives for clients who can afford to pay for services.

Marie Stopes Tanzania partners with the government of Tanzania to reduce spending on training, staff, and equipment for the provision of LAPMs. Marie Stopes International also provides LAPM services throughout Tanzania. These services are provided through central funding that involves multiple donors. However, a cost-recovery system is also in place to help the clinics become more self-sufficient. Between 2001 and 2006, the number of female sterilizations that the organization performed increased significantly from 5,271 to 48,000—more than 50 percent of all female sterilizations performed in Tanzania.¹⁰

PSI/Nepal's Sun Quality Health Network, created in 2003, is a social franchise composed of partnerships with more than 200 private health clinics. It uses the clinics in conjunction with health fairs to offer high-quality counseling and services for IUDs, vasectomy, and female sterilization. By 2006, nearly 2,000 IUDs had been provided and 6,000 voluntary sterilizations performed at stationary and mobile clinics.¹¹

Through the three-year AMUA project in Kenya, Marie Stopes International and Marie Stopes Kenya established a network of 141 social franchises composed of doctors, clinical officers, nurses, and community-based distribution workers who provide LAPM services in five provinces. Between 2004 and 2007, more than 15,000 IUDs were inserted and more than 20,000 female sterilizations performed.¹²

Implement comprehensive approaches

The most successful efforts to introduce or revitalize LAPMs simultaneously increase demand for services and improve the way the services are delivered. The nurturing of “champions” who advocate for LAPMs and the support of governments, medical communities, local leaders, and the general public are important components of a comprehensive approach.

In 2003, the Kenya Ministry of Health launched an initiative to revitalize the IUD. Gaining stakeholder support, building capacity to provide high-quality services, disseminating accurate information about the IUD, and monitoring and evaluating progress were all part of the national reintroduction strategy. During the project, approximately 2,800 women at 97 AMKENI-supported facilities initiated IUD use. The number of new IUD acceptors in those facilities more than doubled between 2003 and 2005.¹³

The Ghana Health Service collaborated with EngenderHealth/The ACQUIRE Project and the U.S. Agency for International Development's Mission in Ghana to determine whether vasectomy was a viable contraceptive option. An intervention in 2004 included community outreach, an intense



media campaign, and training of providers and clinic staff to offer better vasectomy services. The number of vasectomies performed in the program areas increased from 18 in 2003 to 81 in 2004.¹⁴

Document efforts for sustainability and scale-up

Although traditional and innovative approaches for revitalizing LAPMs have been implemented, documentation on prolonged efforts is limited. Additional research and long-term monitoring and evaluation are still needed to identify the most effective and sustainable interventions. Documenting pilot programs or “promising practices” as they are replicated or enlarged will help identify those interventions that are most likely to improve access to LAPMs and to overall reproductive choice.

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The IUD subcommittee of the U.S. Agency for International Development’s Maximizing Access and Quality Initiative developed the IUD Toolkit to help improve the quality of and access to IUD services. Released in 2006, the toolkit is an online resource providing comprehensive evidence-based information on IUDs. Policy-makers, program managers, providers, and others can learn about innovations for expanding access to IUDs, use the toolkit to improve existing IUD services or add new services to their programs, and adapt the toolkit to local contexts. In the first half of 2007, the toolkit received more than 45,000 visits worldwide.

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- Implants provide highly effective, long-acting pregnancy protection (3 to 5 years)
- Although insertion and removal require a trained provider, both procedures are done quickly
- Contraceptive protection is immediately reversible upon implant removal; implants have no impact on long-term fertility

Background

Contraceptive implants are matchstick-sized rods that contain progestin. Implanted beneath the skin of a woman's upper arm, the progestin is slowly released over 3 to 5 years. Implants interrupt fertility by thickening cervical mucus (mechanically preventing the sperm from accessing the ovum) and through hormonal effects that prevent ovulation in about half of menstrual cycles. Family planning programs are introducing the new one- or two-rod implant systems Implanon®, Jadelle®, and in some countries Sino-Implant (II)®. By 2008 Norplant, the six-capsule implant system, will no longer be available.

Implant types: The most common contraceptive implants include:

- Jadelle: 2 rods, provides contraception for 5 years
- Implanon: 1 rod, provides contraception for 3 years
- Norplant: 6 capsules, provides contraception for 5-7 years (to be discontinued in 2008)
- Sino-Implant (II): 2 rods, provides contraception for 4 years

Method characteristics: Contraceptive implants are highly effective at preventing pregnancy, long-acting, totally user-independent, and completely and immediately reversible upon removal. Unlike some other hormonal forms of contraception, implants can be used by cigarette smokers, women who have risk factors for cardiovascular disease (including high blood pressure), and women who are breastfeeding (after 6 weeks post-partum).

Insertion requires a minor surgical procedure by a trained practitioner using appropriate aseptic technique in a sterile surgical environment. As with other hormonal contraceptive methods, some women experience side effects such as headaches, breast tenderness, mood changes, nausea, and unpredictable vaginal bleeding—all of which usually decrease over time. Unpredictable vaginal bleeding associated with the use of implants sometimes leads users to have the implants removed, so appropriate counseling is essential to reduce discontinuation.

Health benefits: Unlike some other hormonal forms of contraception, implants do not contain estrogen, so women can safely breastfeed with an implant in place. Because implants may cause menstrual bleeding to be lighter, less frequent, or absent, some users may have a decreased risk of iron-deficiency anemia. Users also gain protection against health risks associated with pregnancy, pelvic inflammatory disease, and ectopic pregnancy. Implants have no effect on sexual function.

Conditions that may make use of implants unsafe: In most cases, women with the following conditions should be advised to use a different form of contraception:

- Serious liver disease, such as liver tumor, severe cirrhosis, or active hepatitis
- Current deep venous thrombosis or pulmonary embolus
- Unexplained or unusual vaginal bleeding that requires evaluation
- Current use of antiseizure drugs (barbiturates, carbamazepine, oxcarbazepine, phenytoin, primidone, topiramate) or rifampicin
- Breast cancer (currently or in the past)



In most cases, breastfeeding women who are fewer than six weeks post-partum should delay initiation of contraceptive implant use.

Sexually transmitted infections and HIV/AIDS: Implants provide no protection against STIs and HIV/AIDS. A male or female condom should be used to decrease the risk of transmission. Women with HIV/AIDS can use implants, but should also use a barrier method to decrease the risk of disease transmission.

Special considerations: Contraceptive efficacy of Norplant and Jadelle is reduced more quickly in women who are overweight. For women weighing 80 kg or more, Jadelle and Norplant become less effective after four years of use. For women weighing 70–79 kg, Norplant becomes less effective after five years of use. These women should have their implants replaced sooner.

Programmatic considerations

Offering implants as a contraceptive choice requires that trained practitioners perform the minor procedures necessary to either insert or remove the device in a reliably aseptic environment. Counseling should also be made available to potential recipients, so that they clearly understand implant insertion and removal procedures, the risks and benefits of implant use, as well as what to expect in terms of side effects, particularly bleeding changes.

Depending on pricing structures, contraceptive implants can be cost effective when used long term. Jadelle and Implanon have come down in price by about 25 percent since 2006 (to around US\$20), which has stimulated demand at the program level. The price of Sino-Implant (II) is expected to be between US\$5–\$8 and, if approved beyond China and Indonesia, will further improve the availability of implants.

Lessons learned

The following points increase the likelihood of success in a program offering implants as a contraceptive choice:

- Prior to offering implants, the program should carefully assess its ability to sustainably provide:
 - Adequate pre-insertion counseling to potential users, so clients can make an informed decision about implants
 - Trained providers who are available for both insertion and removal of implants
 - An aseptic environment in which insertion and removal can take place
 - All of the equipment necessary for implant insertion and removal
 - A database and information system that will allow users to be located and contacted toward the end of the implant's lifespan, so that removal occurs on time
 - A steady supply of implants
 - Reliable access to removal services
- Community groups should be involved in the addition of implants to the program's menu of contraceptive choices, and information should be available in the community's language for potential practitioners, users, and community groups.
- Cultural context and acceptability of the device and its side effects should be considered.
- Providers offering contraceptive implants should be supervised and programs evaluated on an ongoing basis.

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Programs and providers are now making IUDs more available. Reasons for this resurgence include:

- Recognition of the IUD's many advantages
- New research findings on safety—resulting in liberalized guidance from WHO
- A new program strategy, focusing on developing a core of skilled providers motivated to offer IUDs

Main positives: For Copper-T380A IUDs, positives include very high effectiveness, potentially 10+ years of use, low cost of commodity, convenience, suitability for a wide variety of women, and very high client satisfaction generally.

Main negatives: Most women report no or negligible side effects. However, an important minority have significant pain, bleeding, spotting, or expulsion. In addition, for women at risk of gonorrhea and chlamydia, IUD use increases the possibility of pelvic infection. Program requirements are extensive, including skilled providers, good counseling, supplies, equipment, and time and place to perform insertions.

New evidence on safety: A study in Kenya found that HIV+ and HIV- women adopting IUDs had similar rates of complications.¹ A study in Mexico found that IUDs were not associated with infertility.² Accumulated evidence from a number of studies indicates that the absolute increase in risk of pelvic inflammatory disease (PID) associated with the IUD is quite low even where STIs are relatively common.

Broadened eligibility based on WHO guidance: In response to such new evidence, WHO in late 2003 changed the medical eligibility classification of the IUD from 3 to 2 ("generally use the method") for HIV+ women and those with successfully treated AIDS. Also, increased STI risk is now a Category 2 unless a woman has a "very high individual likelihood of exposure" to gonorrhea or chlamydia.

Mechanism of action: Contrary to the common belief that the IUD works by preventing implantation, in fact the IUD works predominantly to prevent fertilization, by inhibiting sperm from reaching the egg and by altering the egg.

Unjustified medical barriers: Common barriers include restrictions on eligibility related to age or parity (in fact, they can be used by women of any age or parity), restricting insertion to the menstrual period, withholding insertion because of a vaginal discharge, and mandating excessive follow-up visits (actually one check-up 3 to 6 weeks after insertion or after the next menstrual period is recommended).





Current problems with IUD programming: In a number of countries the IUD is the leading method. However, in many others it is a minor method. Contributing factors include: stigma and aftermath of the IUD issues of the 1970s and '80s; exaggeration of the legitimate concern about STIs and the relationship to PID; provider perspective (notably, that providing IUDs is a lot of work, requires skill and confidence and moderately extensive equipment and supplies); and poor management of the side effects that can commonly occur.

New program approach: As with any program effort, focus should include training, guidelines, supplies and logistics, communication, supervision, organization of work, etc. In the past, programs have often tried unsuccessfully to advance IUD use by very broad-based approaches such as training many providers across skill levels. While in principle someone with minimal training can insert an IUD, in actual practice such providers may lack the confidence, experience, and proficiency or may lose them rapidly without a large volume of IUD clients. An alternative is to focus on a smaller number of skilled providers and support expansion through those providers who perform well. Evidence from Bolivia nationally (where IUDs are the number one method) and smaller efforts in Bangladesh, India, and Pakistan supports this approach. In any case, a key step is to learn providers' views and gain insight into what might motivate them to provide IUDs.

Many programs have not taken the IUD seriously because of an incorrect view that STIs are too common in their client population to offer this method. Such concerns can be addressed by building on the new WHO guidance and the new research findings and by removing common medical barriers.

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Female Sterilization: The Most Popular Method of Modern Contraception



Tech Brief Principal Preparers:
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- Female sterilization is the most widely used modern method in the world, including developing regions and many developed countries such as the United States.
- Female sterilization is a safe, highly effective, relatively simple, surgical means of contraception that can usually be provided in an outpatient setting and is intended to be permanent.
- Effective FP/RH programs should have an active, accessible, voluntary female sterilization component that delivers quality services to women who make a free and informed choice for this method from within a range of contraceptive options.

Method-specific characteristics and considerations

Convenience/Timing: Female sterilization can safely be provided post-partum, post-abortion, or as an interval procedure (unrelated to a pregnancy), under light sedation, in an outpatient facility. It is immediately effective, coitally independent, and does not require routine follow-up. The post-partum and post-abortion periods are good (if neglected) times to provide sterilization, as it is then technically easier, less expensive, and more convenient for many clients; counseling in these situations should be conducted in advance of the procedure or labor.

Effectiveness: Female sterilization is highly effective. Risk of failure (pregnancy), while very low, persists after the procedure, does not diminish with time, and is higher in younger women. Cumulative pregnancy rates of 5.5/1000 procedures at one year, 13/1000 at five years, and 18.5/1000 at ten years have been reported; one-third of such uncommon pregnancies are ectopic.

Safety: Female sterilization is safe, with few medical restrictions. Death is rare: 1–4/100,000 procedures in the U.S. (usually related to general anesthesia), and estimated at 5/100,000 in developing countries. Overall complication rates are generally low, estimated to be between 9–16/1000 procedures. The use of minilaparotomy with local anesthesia and light sedation has allowed wider provision of services.



HIV/AIDS: Female sterilization does not protect against HIV infection. Being HIV-positive is not a reason to be denied sterilization. A woman with AIDS, who is clinically stable, may receive sterilization, in settings with experienced staff and the needed equipment and support.

Regret: Most women who choose sterilization do not regret their decision. There are clear correlates of subsequent regret, however: young age, marital instability, decisions made in the absence of other long-term options, and decisions made under pressure. Thus pre-sterilization counseling is critical.



Counseling: Free and informed choice calls for “two-way” counseling. It should address: sterilization’s intended permanence; the availability and characteristics of alternative methods; the client’s reasons for her choice; screening and discussion of risk indicators for regret; details of the procedure; the possibility of failure; and the completion of the informed consent (authorization) process. Younger women may need extra time to consider their future life goals and other options for long-term contraception, such as implants or the IUD. The counseling required for sterilization may require more time than counseling for temporary methods, but it helps to foster greater client satisfaction and community support, as well as to reduce myths and misunderstandings.

Programmatic considerations

Female sterilization must be provided by well-trained and motivated providers in properly equipped health facilities where full attention is given to good surgical technique, infection prevention, and counseling. There should not be any unjustified policy or practice barriers to provision of these services, including legal restrictions, age and parity restrictions, marriage requirements, spousal or parental consent requirements, and provider bias.

Lessons learned: There are a number of ways to improve access and assure quality of female sterilization services, all of which entail a holistic approach, with a focus on the fundamentals of service delivery:

- Center program efforts on the client by providing effective counseling and communication.
- Assure informed choice by providing accurate information and a range of methods.
- Train, equip, supervise, and support providers to offer locally acceptable, feasible, safe and effective female sterilization services.
- Identify, nurture and sustain “champions.”
 - Involve influential and committed providers or institutions who provide high quality sterilization services and can advocate for and help to expand services.
 - Involve men as supportive partners, community opinion leaders, potential advocates, and potential alternative sterilization (vasectomy) clients.
 - Strengthen the role of community-based advocates (e.g., satisfied clients, community health workers) for outreach, counseling, and/or demand creation.
- Build “ownership” within communities by ensuring that clinical services are client-responsive and of good quality.
- Collect and use data for program design, to identify champions and to focus program efforts.
- Tailor the program to its local context by developing post-partum and post-abortion, private sector, and mobile outreach services, using appropriate technologies and methodologies.

Contraceptive Sterilization: Global Issues and Trends. New York: EngenderHealth, 2002.

Minilaparotomy for Female Sterilization. New York: EngenderHealth, 2003.

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- Vasectomy is a very safe¹, convenient, highly effective, and simple surgical form of contraception for men that is provided under local anesthesia in an outpatient setting and is intended to be permanent.
- Although vasectomy is safer, simpler, less expensive, and equally effective as female sterilization, it remains the least known and least used modern contraceptive method.
- Men in every region and cultural, religious, or socioeconomic setting show interest in or use of vasectomy, despite commonly held assumptions about negative male attitudes or societal prohibitions; however, men often lack full access to information and services.
- Thoughtful, male-centered programming has resulted in greater use of vasectomy.
- Effective FP/RH programs should have an active, accessible vasectomy component that delivers quality services, with wide contraceptive options for the man and his partner, and informed choice.

Method-specific characteristics and considerations

Effectiveness: Vasectomy is highly effective, comparable to female sterilization and to long-term, reversible female methods such as implants and IUDs. Vasectomy is not effective immediately, however, and WHO recommends that the couple use alternative contraception for 3 months after the procedure. Risk of failure (pregnancy) is commonly quoted as from 0.2% to 0.4%, but failures rates as high as 3–5% have been reported. Failure may be due to client behavior (when alternative contraception is not used after the procedure) or may be due to technical failure from the procedure.

Safety: Vasectomy is very safe, with few medical restrictions. Major morbidity and mortality is rare and adverse long-term effects have not been found. Minor complications such as post-operative infection, bleeding/hematoma formation, and short- or long-term pain occur at reported rates of 5–10%. The no-scalpel technique has a much lower incidence of post-operative complications than by incision.

HIV/AIDS: Vasectomy does not protect against HIV infection. Being HIV-positive is not a reason to be denied vasectomy. A man with AIDS who is clinically stable may also receive vasectomy.

Regret: Most men who choose vasectomy do not regret their decision. There are clear correlates of subsequent regret, however: young age, marital instability, and decisions made under financial or other pressure. Thus careful and complete pre-vasectomy counseling is critical.

Counseling: Counseling should be “two-way.” It should address fears (e.g., about post-procedure sexual functioning or pain) and correct myths (e.g., “vasectomy equals castration,” or “it makes you weak”). It should emphasize that vasectomy: is intended to be permanent; is difficult to reverse; can





fail; does not protect against STIs including HIV; and does not take effect immediately after the procedure, hence alternative contraception must be used. Screening for risk indicators for regret should also be done, and the informed consent (authorization) process should be completed.

Programmatic considerations

No-scalpel vasectomy (NSV) is the preferable vasectomy technique. It should be provided by well-trained and motivated providers in properly equipped health facilities where attention is given to good surgical technique, infection prevention, and counseling.² When performed by a trained operator, vasectomy takes 15 minutes or less.

Lessons learned: Service access and quality can be increased by: being attentive to the needs of men and to the needs of vasectomy providers; taking a holistic approach (i.e., addressing both “demand” and “supply” factors); and focusing on the fundamentals of service delivery.

Successful NSV programs generally include the following ingredients:

- Effective promotion, providing accurate information via multiple means, including mass media (billboards, newspaper/magazine ads, radio/TV spots, telephone hotlines), community channels, and interpersonal communication, using satisfied vasectomy clients where feasible.³
- Attention paid to the needs of men, providing: thorough, sensitive counseling; privacy and confidentiality; and an array of convenient and affordable services.⁴
- Skilled individual providers and teams, who are well-trained, well-equipped, and who are actively providing quality NSV information and services.⁵
- Strong leadership by “champions,” influential and committed providers or institutions who are particularly active in providing quality NSV services, and are willing to “replicate themselves.”
- Collection and use of data for program design, to identify champions, and to focus activities.
- Tailoring the program to the local context; e.g., by developing private sector and/or mobile outreach services, and by using appropriate approaches, technologies, and methodologies.

1 Vasectomy is safer than female sterilization since it is less invasive and almost always performed under local anesthesia.

2 Many studies using mystery clients have shown that very often vasectomy is not even mentioned when family planning is being discussed with clients, even with those who indicate that they want to limit future births.

3 Multiple communication channels can create a synergistic effect, and should be targeted to women as well as men. This is important because “Vasectomy is as much an IEC operation as a surgical operation.” Brazil, Colombia and Guatemala were able to double their vasectomy caseload through multimedia campaigns. Telephone hotlines increased caseloads in Kenya and the U.S.

4 For example, be open on evenings or weekends; maintain male-only clinics, if feasible, or at least separate waiting areas; use male providers; offer general male health care and reproductive care for sexual dysfunction, STIs, infertility, etc., in addition to NSV.

5 A systematic analytic approach, e.g., Performance Improvement, is useful to identify gaps in providers’ knowledge, communication or surgical skills, and other program needs. If training is the indicated intervention, on-the-job and whole-site training are proven effective approaches.

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Where to get more information: www.maqweb.org

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No-Scalpel Vasectomy: An Illustrated Guide for Surgeons. New York: EngenderHealth, 2003.

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