AWARENESS Project Peru Country Report 2002–2007

Submitted by: The Institute for Reproductive Health Georgetown University January 2008



© 2008. Institute for Reproductive Health, Georgetown University **Recommended Citation:** Peru Country Report: 2002–2007. January 2008. Washington, D.C.: Institute for Reproductive Health, Georgetown University for the U.S. Agency for International Development (USAID).

leading technical resource and learning center committed to developing and increasing the availability of effective, easy-to-use, natural methods for family planning.

The Institute for Reproductive Health, affiliated with Georgetown University in Washington, D.C., is a

The purpose of the AWARENESS Project was to improve contraceptive choices by expanding natural family planning options and developing new strategies and approaches to increase the reproductive health awareness of individuals and communities in developing countries.

This publication was made possible through support provided by the United States Agency for International Development (USAID) under the terms of the Cooperative Agreement No. HRN-A-00-97-00011-00. The contents of this document do not necessarily reflect the views or policies of USAID or Georgetown University.

The AWARENESS Project Institute for Reproductive Health Georgetown University 4301 Connecticut Avenue, N.W., Suite 310 Washington, D.C. 20008 USA Email: <u>irhinfo@georgetown.edu</u> URL: <u>www.irh.org</u>

Acronyms	<i>i</i>
Country Program Summary	<i>ii</i>
I. Introduction	1
II. Goal, Objectives, and Strategies	2
III. Activities and Accomplishments	3
A. Research	3
B. Activities to generate evidence to support integration of the SDM into pu	blic
services (2002-2005)	6
i. Advocacy	6
ii. Awareness-building	7
iii. Building local capacity	7
iv. Training	8
v. Demand generation	8
vi. Integration into support systems	9
vii. Overall results of introducing the SDM in San Martin	10
viii. Results beyond San Martin	10
C. Developing the capacity of local organizations (2005-2007)	11
i. Overall approach	11
ii. Building support and awareness	11
iii. Inclusion of the SDM in pre-service teaching for health profession	als
	12
iv. MIS	13
v. Logistics	14
IV. Lessons Learned	14
V. Challenges	15
VI. Future Plans	16

TABLE OF CONTENTS

Acronyms

ADRA	Adventist Development & Relief Agency
ASPEFOBST	Peruvian Association of Midwifery Schools
FAB	Fertility Awareness-based
FBO	Faith-based Organization
IEC	Information, Education, and Communication
INPPARES	Peruvian Institute for Responsible Parenthood
IRH	Institute for Reproductive Health
ISR	Institute for Reproductive Health (Peru)
KIT	Knowledge Improvement Tool
LAM	Lactational Amenorrhea Method
MIS	Management Information System
MOH	Ministry of Health
NGO	Non-governmental Organization
SDM	Standard Days Method [®]
TDM	TwoDay Method [®]
USAID	United States Agency for International Development

Country Program Summary

The AWARENESS Project

Expanding Family Planning Choices Worldwide

November 2007

Peru

Country Context

Peru has a total population of over 28 million, of which nearly half are of reproductive age. The total fertility rate is 2.9. The contraceptive prevalence rate is almost 71%, with slightly over 50% of women in union using a modern method, and an unmet need of only 10%. However, "periodic abstinence" is the most frequently used family planning (FP) method (17.5% of women in union). Contraceptive effectiveness and modern-method prevalence could be increased by making simple, modern fertility awareness-based methods (FAM) available to current users of traditional practices such as periodic abstinence (reported as predominantly calendar-rhythm). IRH has been active in Peru since the late 1980s, introducing both natural family planning and the Lactational Amenorrhea Method (LAM), and conducting numerous multisite feasibility and efficacy studies of FAM that set the foundation for Ministry of Health (MOH) willingness to scale up services, a program summarized here. Peru participated in the AWARENESS Project from 2002–2007.

Approach

- To help fill the unmet need for family planning by facilitating the availability of FAM in selected areas of the country.
- Initially (2002–2005), to generate evidence about the feasibility of incorporating the Standard Days Method[®] (SDM) in the MOH's services and its eventual contribution to reducing both unmet need for family planning and unplanned pregnancies.
- To facilitate integration of the SDM into MOH and other services in a sustainable manner in collaboration with *Instituto de Salud Reproductiva* (ISR), a Peruvian NGO.

Key Activities

- Building capacity of local organizations to make SDM services sustainable.
- Focusing on the public sector, specifically the MOH, due to its support for the SDM and its large national service delivery network, which makes it by far the largest provider of family planning services in the country.
- Working with MOH program managers to integrate the SDM into support systems, including training, Information Education and Communication (IEC), Management Information/Monitoring and Evaluation (MIS/M&E), supervision, and logistics.
- Including the SDM in pre-service provider education to guarantee future availability of health professional knowledgeable in the SDM, particularly midwives, as they provide most of the family planning services in the country.

Research

Peru has been a lead site for feasibility and efficacy studies of FAM.

SDM Pilot and Efficacy Studies: A three-month pilot study confirmed demand for and feasibility of SDM service provision. The multisite, international efficacy





study followed women in two Peruvian sites for one year and documented demand, effectiveness (95% at one year), correct use by the majority of women, and feasibility of public-sector service provision. These studies were completed in 2000 and 2001, respectively.

SDM Long-Term Follow-Up Study: This study examined long-term continuation among SDM users and method efficacy beyond the first year of use. Continuation rates were high (67% after two years in this study, or 36 months of method use), as was typical-use efficacy in years two and three (95% and 97%, respectively).

Large-Scale SDM Integration into Private and Public Reproductive and Child Health

Services: This study measured the effect that adding the SDM to existing services would have on community-level awareness, use of the method, and overall contraceptive prevalence. Results in Peru showed that adding the SDM to the method mix can lead to strong demand for it, but only a moderate increase in overall prevalence. Providers were able to provide high-quality counseling in a single brief session, though they often imposed medical barriers (e.g., having the woman monitor the length of several cycles before initiating the method).

TwoDay Method Efficacy Trial: This study determined the efficacy of the TDM during the first year of use. Key findings (from three countries) showed that the method was 96.5% effective when used correctly, and that public programs can provide the TDM effectively, with over 90% of clients using the method correctly.

TwoDay Method Long-Term Follow-Up Study: This study examined long-term continuation among TDM users and method effectiveness beyond the first year of use. Continuation rates were high (61% were still using the method after two years in the study, or 36 months of

I liked the idea of the SDM right away—it was an easy decision for me to start using it. What interested me most was that it was natural, and I've been using it now for a year and eight months. For me, it was easy to learn to use and I haven't had any problems. I am happy with the SDM since I don't have to take anything anymore and I don't have any of the side effects that I used to have when I was taking the pill and the injectable. My husband likes the method too.

Housewife with Two Children

method use), and typical-use effectiveness in years two and three was also high (92.1% and 94.9%, respectively).

TwoDay Method "Quick Start" Study: This study assessed whether the method could be initiated at any point in the woman's menstrual cycle (versus having to wait until the beginning of the next cycle, as was the case in the efficacy study). Results showed that women used the TDM correctly regardless of when in their cycle they were taught how to use it.

Transition from LAM to SDM: This study was designed to assess whether a protocol to help women transition from LAM to the SDM was a viable approach. It followed 212 participants in Guatemala and Peru on a monthly basis as they moved through the different postpartum phases. Data was collected on pregnancy status, compliance with method instruction, ease of use, and acceptability. Women were able to follow the protocol, providing significant protection from pregnancy, but a simpler approach is needed for regular service delivery.

SDM Integration

San Martin Pilot Phase (2002–2005)

The San Martin Department piloted SDM service delivery to assess the impact of integration on the overall family planning program. The project was designed to generate evidence for MOH policy makers on the effect of adding the SDM to their regular services. IRH worked with managers of the MOH/San Martin departments of training, IEC, MIS/M&E, supervision, and logistics to incorporate the SDM into their systems and activities. Approximately one year after SDM services became available in Lamas and San Martin provinces, MOH managers from neighboring provinces observed

the successful experience and requested technical assistance to introduce the SDM in their provinces.

The project was completed in October 2005. Two years later, MOH service statistics continue to show between 225 and 250 new SDM users every month, representing about 6% of new users.

The most important result of the San Martin experience was the response of central-level MOH authorities: they authorized and encouraged ISR to work with the MOH in other departments of the country, facilitated contacts, and publicly acknowledged that the SDM was an appropriate family planning option to include in services.

Expansion Phase (2005–2007)

IRH, the central MOH and the USAID Mission selected regions in rural and peri-urban areas of the departments of Lima, Callao, Arequipa, and Tumbes for expansion of SDM activities. Cost and logistics were important factors in this selection. Integration into MOH activities in rural and periurban areas of Lima started in mid-2005, and in Tumbes, Arequipa, and Callao in 2006. Almost all sites with trained personnel started reporting SDM users within approximately three months of starting services, albeit at a slower pace than San Martin.

The MOH incorporated the SDM into support services such as logistics (in all expansion sites) and management information systems nationally. Through late 2007, the MOH had not been able to include CycleBeads[®] in the national budget from which contraceptives are procured.

Although not incorporated in MOH supervisory instruments, supervisors in all project sites were oriented to SDM supervision issues and have been observed addressing them.

The SDM is included in the pre-service standardized minimum curriculum of all accredited midwifery schools.

Lessons to Guide Future Programming

- Focusing on the MOH led to the establishment of a critical mass of accessible SDM services in many parts of the country. The MOH proved to be a responsive partner and had the capacity to absorb and put in practice the technical assistance provided.
- The initial investment on local capacity building and integration of the SDM into support systems was a key factor in achieving sustainable services. This suggests that some degree of technical support would be necessary to introduce the SDM and achieve sustainability in other areas of the country.
- While IEC activities contributed to a relatively rapid increase in the number of SDM users in San Martin, early demand for the SDM was still moderately strong in areas where there were significantly fewer IEC activities. While this reduced the cost and effort of SDM introduction, a moderate level of external support was still necessary.
- Evidence generated in the San Martin pilot project was instrumental for the decision by centrallevel and regional MOH policy makers to bring the SDM to other areas of the country. At present, existing evidence is sufficient to drive the decision making process to expand SDM services to other areas.
- Focusing on schools of midwifery for university level pre-service education produced the desired
 result: universities included the method in their curricula and are graduating hundreds of new
 professionals every year who are knowledgeable about the SDM. While it would be beneficial to
 expand efforts to schools of medicine and/or nursing, it would be more cost-effective to channel
 resources to additional schools of midwifery.

- CycleBeads procurement continues to be an issue, particularly as donor support for reproductive health supplies diminishes and the MOH budget is constrained. This is the case even though local production is well-established in Peru.
- The NGO and for-profit private sectors may offer additional avenues for sustainable SDM services.
- With several TDM studies having been conducted in Peru, there is sufficient local evidence on which to build services. There is considerable interest from some regional MOHs and universities; however, technical support is still needed.

Institute for Reproductive Health

Georgetown University 4301 Connecticut Avenue, NW Suite 310 Washington, DC 20008 USA www.irh.org

This publication is made possible by the generous support of the American people through the United States Agency for International Development (USAID) under terms of cooperative agreement HRN-A-00-97-00011-00. The information contained in this publication does not reflect the views of USAID or Georgetown University.

1

I. Introduction

Peru, a mid-sized country in western South America, has three very distinct regions—coastal, mountainous, and jungle—each with its characteristic ethnic, cultural, and geographic traits. After several years of poor performance, the economy is now growing, but distribution of wealth is very uneven, and poverty and lack of employment opportunity remain serious problems.

Peru has a population of over 28 million, nearly half of reproductive age, and a total fertility rate of 2.9. The contraceptive prevalence rate is almost 71%, with slightly

over 50% of women in union using a modern method and an unmet need of only 10%. However, "periodic abstinence" is the most frequently used family planning method (17.5% of women in union, followed by injectables at 11.2%, and tubal ligation at 10.4%). Contraceptive effectiveness and modern-method prevalence could be increased by making simple, modern fertility awareness-based (FAB) methods available to current users of traditional practices such as periodic abstinence (reported as predominantly calendar-rhythm).¹

Georgetown University's Institute for reproductive Health (IRH), with support from USAID through the AWARENESS Project and the previous Natural Family Planning Project, has worked in Peru since the late 1980s, when it partnered with a faith-based organization (FBO) to promote natural family planning. In the mid-1990s, IRH facilitated the introduction of the Lactational Amenorrhea Method (LAM) into Ministry of Health (MOH) services. IRH tested both the Standard Days Method[®] (SDM) and the TwoDay Method[®] (TDM) in Peru to determine efficacy and feasibility. Peru has successfully introduced the SDM into existing services and is scaling up the program. It has been—and continues to be—the site of several important studies for both the SDM and TDM.

The long-term goal of IRH's work in Peru is to make high-quality FAB services available in a sustainable manner as an option for couples throughout the country. Although IRH has worked with many private and public organizations in Peru, the MOH has always been its prime partner. Since 2000, the *Instituto de Salud Reproductiva – Peru* (ISR), a Peruvian nongovernmental organization (NGO) supported by IRH, has carried out all IRH's in-country activities.

The country's strategic importance for USAID and its potential to increase the effective use of family planning by women using traditional periodic abstinence led to Peru's selection as one of the countries to introduce SDM to regular services. Peru sites have participated in many key SDM and TDM studies, which interested the MOH in the method and its potential in the national program. Also, IRH's experience in Peru with the introduction of LAM into public services in the mid-1990s provided a good starting point when advocating and negotiating with key decisionmakers.

COLOMBIA ECHADOR Iquitos Talara Piura Yurimaguas BRAZ Chiclavo Trujillo Chimbote luánuco SOUTH LIMA PACIFIC Callac Huancavo OCEAN Cusco Maldonado Ica BOLIVIA Arequipa Matarani 300 m

Source: CIA World Factbook 2008

¹ Encuesta Demográfica y de Salud Familiar 2000. Lima: Instituto Nacional de Estadística e Informática.

II. Goal, Objectives, and Strategies

The general goal of IRH's work in Peru was to address the unmet need for family planning by facilitating the availability of FAB methods in selected areas of the country, particularly the integration of the SDM into MOH and other services. To achieve this, IRH worked in collaboration with ISR, its partner organization, following several complementary strategies.

Strategies:

- The most important strategic approach was to focus on long-term sustainability of services. This meant building the foundation of a strong, sustainable SDM service delivery system, sometimes at the expense of shorter-term more-visible results.
- IRH focused on the public sector, specifically the MOH, because of its support for the SDM, and the size and scope of its service delivery network.
- In an initial phase (2002–2005), the objective was to generate evidence for MOH policymakers and program managers about the feasibility of including the SDM in MOH services and its potential contribution to MOH strategic goals of meeting the unmet need for family planning services and reducing the number of unwanted pregnancies.
- Once policymakers had agreed to scale up SDM availability, the strategy was to build capacity among local organizations for sustainable services, including work towards integration of the SDM in support systems.
- IRH also facilitated the inclusion of the SDM in pre-service education of health professionals, focusing on midwifery schools, to ensure that midwives, who do most of the family planning work in the country, were knowledgeable about the SDM.

IRH's work focused on the MOH, by far the largest provider of family planning and other health services throughout the country. It has a large, well-developed facility network with significant geographical coverage, a large number of fairly skilled providers, and functioning support systems. Key decisionmakers and technical staff in the MOH demonstrated interest in the SDM from the very beginning, stating that it would be a good addition to services, given the MOH's strategic objectives and programmatic approaches, and the country's cultural context. Preliminary and final results of the SDM efficacy trial turned this interest into an agreement to take the method to scale, as the study provided evidence that the SDM would be a viable, beneficial, and cost-effective family planning method in a regular service delivery context.

In order for SDM services to be sustainable in the long term, the method needs to be fully integrated into organizations' support systems, such as training and updating of staff; procurement and logistics of commodities; supervision; information, education, and communication (IEC) activities; and monitoring and evaluation. Accomplishing this can be a challenge because many program managers and other decisionmakers assume that training provided by an external source is all it takes to start and sustain services.

Given IRH's role, it is key for sustainability that local organizations assume responsibility for scaling up SDM services. International organizations have very few activities in-country and the scope of their work continues to decrease. Universities need to take over the task of teaching future health professionals about FAB methods. IRH's work focused on schools of midwifery

because midwives provide most of the family planning and RH services in the public sector. Key decisionmakers in midwifery schools and professional organizations were receptive and supportive of FAB methods.

III. Activities and Accomplishments

IRH has collaborated with numerous family planning/reproductive health organizations in Peru, including some technical areas of the central MOH offices, the Peruvian Institute for Responsible Parenting (INPPARES—affiliate of the International Planned Parenthood Federation and the largest private provider of family planning services), and international agencies active in Peru, such as CARE, JHPIEGO, Johns Hopkins University/Center for Communication Programs, the Population Council, Management Sciences for Health, Pathfinder, and the Adventist Development & Relief Agency (ADRA).

In early project stages focused on generating evidence, IRH worked primarily with organizations active in the research locales (Puno, Amazonas, Piura, and San Martin departments) that could include the SDM (or other methods) in their activities. This included the regional MOH, CARE, ADRA, local NGOs and FBOs, and local military and police health systems.

Starting in 2005, when the focus of IRH's work turned to scaling up SDM services, IRH strengthened its collaboration with organizations that had earlier expressed interest in supporting the SDM. These included the Peruvian Association of Midwives, Peruvian Association of Midwifery Schools (ASPEFOBST), INPPARES, and MOH offices from other regions of the country.

A. Research

Peru participated in a number of IRH-led studies under the AWARENESS Project including:

- SDM: pilot study, efficacy trial, long-term follow-up study, and impact study
- TDM: pilot study, efficacy trial, long-term follow-up study, and an operations research study, and
- Pilot study of fertility-awareness algorithms to transition postpartum women from LAM to other FAB methods.

SDM pilot study

This short-term study examined the feasibility of teaching the SDM in a brief counseling session and of correct use by typical clients of public-sector programs. The study took place over four months in 1999, with some 30 couples in one site in Juliaca. Key findings showed that MOH providers could teach the SDM to their clients; that women easily understood how to use the method; and that couples were able to use it correctly, including avoiding unprotected intercourse during fertile days. Results concurred with those from Bolivia and the Philippines. These findings warranted the implementation of a full efficacy trial.

SDM efficacy trial

Women from two sites (Juliaca and peri-urban Lima) used the SDM for up to one year, as part of a multisite, prospective trial conducted in 2000–2001 to determine the use-efficacy of the method. Additional sites included the Philippines and Bolivia. The overall study found the method was 95% effective with correct use. These results prompted the MOH to accept IRH's offer of technical assistance to introduce the SDM to regular services in Peru.

SDM long-term follow-up study

This study explored long-term continuation rates among SDM users, and method efficacy beyond the first year of method use. Couples who had participated in the SDM efficacy trial were invited to participate in a continuation study. Most accepted and used the method for up to two more years between 2001 and 2003. Key results showed high "I liked the idea of the SDM right away. What interested me most was that it was natural... For me, it was easy to learn to use and I haven't had any problems. I am happy with the SDM since...I don't have any of the side effects that I used to have when I was taking the pill and the injectable. My husband likes the method too." -Housewife with Two Children

continuation rates (67% after two years in this study, or 36 months of method use), and that efficacy in years two and three was also high (94.8 and 96.6% respectively; figures that include both correct and incorrect use).

SDM impact study

While most family planning decisionmakers now accept that adding an effective, simple FAB method to their services is good for their clients, they sometimes question if the method can have a beneficial impact on their family planning program as a whole. This study—carried out in 2004–2006, with Moyobamba as the intervention site—measured the impact that adding the SDM to existing services had on community-level awareness and use of the method and on overall contraceptive prevalence. This was part of a two-year multisite study that also included Rwanda and India. After a baseline survey, the program added the SDM to existing services in 2004. Researchers collected service statistics through 2006; assessed providers' technical competence and quality of services through two rounds of mystery client visits; and conducted an endline survey in 2006. The program also carried out all data collection in Jaen, the control site, where inclusion of the SDM in services was postponed until 2007, after the study had been completed. The key overall finding was that adding the SDM led to strong demand for that method, but only a moderate increase in overall prevalence. The research also highlighted the importance of addressing providers' possible biases and skepticism before they initiate services.

TDM pilot study

A five-month study determined the feasibility of teaching the TDM in a brief counseling session to typical clients of public programs, including establishing whether clients could use the method correctly by noticing cervical secretions and avoiding unprotected intercourse on fertile days. The study was carried out in 2002 in Piura and Iquitos, with additional sites in the Philippines and Guatemala. Results showed that women were able to notice if they had cervical secretions and to use the method correctly. However, careful screening of potential clients was important to

determine ability to negotiate sexual activity during fertile days. These findings warranted implementation of a full efficacy trial.

TDM efficacy trial

Women from Piura and Iquitos used the TDM for up to one year in 2001–2003 as part of an international, prospective trial to determine the use-efficacy of the method. Additional sites in the Philippines and Guatemala also participated. The overall study found the method effective (96.5% when used correctly). The study also confirmed the feasibility of providing the method through public programs, and found that over 90% of clients were using the method correctly after just one counseling session.

TDM long-term follow-up study

Researchers invited couples who had participated in the TDM efficacy trial to participate in a continuation study. Most accepted and used the method for up to two more years during the period 2003–2005. Key results showed high continuation rates (61% were still using the method after two years in the study, or 36 months of method use) and high efficacy in years two and three (92.1% and 94.9% respectively, figures that include correct and incorrect method use). Additionally, some participants either used the method to become pregnant, or decided to become pregnant immediately after completing their third year of method use.

TDM operations research

An important aspect of quality of care is easy access to the method. In the case of the TDM, it was important to know if the method could be taught and initiated at any point in the woman's menstrual cycle (versus having to wait until the beginning of the next cycle, as was the case in the efficacy study). IRH conducted this study in 2006–2007 in one site in Piura and one site in a tertiary obstetrics/gynecology hospital in Lima (Maternidad de Lima). The study divided women who asked for the method into three groups: those who requested and started using the method when they were in the first week of their cycle, those who started using it in the second or third week of their cycle, and those starting towards the end of their cycle. Outcomes included correct knowledge and use of the method. Women were able to use the TDM correctly regardless of when in their cycle they were taught how to use the method.

Pilot study of fertility-awareness algorithms for postpartum women in transition from LAM to other FAB methods

Breastfeeding, particularly as specified in LAM, offers protection from pregnancy in the early postpartum months. The SDM and TDM offer protection from pregnancy once a woman's menstrual cycle has returned to regularity or her cervical mucus pattern is again easy to interpret. Still, there is a gap of several to many months when women can neither rely any longer on LAM nor start using a simple FAB method yet. The postpartum period is a particularly important time for women to protect themselves from pregnancy for both maternal and infant health benefits.

This exploratory study examined fertility-awareness algorithms applicable to women between the third month postpartum and the time when their menstrual cycle becomes regular again. The study—conducted in 2004–2005 in San Martin and in a site in rural Guatemala—looked at whether women could remember and follow several different algorithms over the course of a few months, and whether following them provided sufficient protection from pregnancy. Key findings were that women were able to follow the algorithms, and that these provided significant protection from pregnancy. There is a need to address programmatic issues as well as further simplification of the process, if possible, before proceeding to additional field testing.

B. Activities to generate evidence to support integration of the SDM into public services (2002–2005)

As preliminary results of the SDM efficacy trial became available, IRH shared them with MOH policymakers. In 2002, the MOH examined final efficacy results and agreed to pilot the SDM in one department, with possible expansion to other departments contingent on results of the introductory exercise. The MOH specifically wanted to ensure that:

- demand for the SDM would warrant the costs of adding an additional method to existing services,
- the SDM would not draw users from other family planning methods
- method efficacy in regular service delivery would be similar to that found in the efficacy study, and
- SDM integration into regular services could be done without undue burden to providers and other MOH personnel.

The team chose the department of San Martin, as it was a priority area for the MOH and the USAID Mission. In 2002, San Martin had a primarily rural population of approximately 600,000. Local contraceptive prevalence was 72%, with 61% using modern methods (slightly higher than the national average) and 12% reporting use of traditional methods.

The San Martin MOH had 344 facilities, distributed unevenly among ten operational networks, roughly corresponding to provinces. In an initial phase, the project was to introduce the SDM in two provinces, Lamas and San Martin, chosen primarily for logistical reasons. San Martin network is the largest, encompassing 98 facilities, and some 30,000 women of reproductive age. Lamas is the smallest, with seven facilities and some 13,500 women in that age group.

The project to introduce the SDM in San Martin included the key components considered necessary for sustainability: advocacy, awareness-building, development of local capacity, demand generation, and integration of the method into support systems (i.e., training, IEC, logistics, supervision, management information systems [MIS]).

i. Advocacy

IRH consulted with key gatekeepers from the San Martin MOH in early 2002, while the project was under consideration, and incorporated their input into planning and executing the intervention. Other key stakeholders, including MOH managers, local politicians, and local professional and academic leaders, were also informed and/or consulted in the initial stages.

These efforts help ensure buy-in and that all activities would be sustainable. ISR and the San Martin MOH signed a memorandum of understanding outlining responsibilities in June 2002.

The MOH and other authorities were extremely supportive throughout the project; high-level officials were always available for consultation and willing to participate in training, local dissemination, and other events. They actively facilitated integration of the SDM into support systems. This was instrumental to show lower-level managers and providers that the SDM was a worthy activity; so scheduling workshops, site visits, or other activities was never problematic. The presence of high-level officials made events newsworthy, facilitating coverage by the local media.

Because MOH officials and technical staff participated in the design of the project, SDM activities blended well with their regular activities, making sustainable integration easier. At the same time, ISR advocated with central-level MOH officials for inclusion of the SDM in the National Family Planning Norms and Technical Family Planning/Reproductive Health Guidelines. The MOH notified San Martin officials of this ongoing process and that San Martin could proceed with program activities in the meantime. (The SDM was officially included in the Family Planning Norms and Reproductive Health Guides in 2004.)

ii. Awareness building

A launch ceremony with the participation of all key stakeholders and the local media marked project start up. At every stage in the training cascade and implementation, ISR made efforts to give advance notice to and meet with involved service providers and others to make scheduling of events easier and to obtain their buy-in.

iii. Building local capacity

In 2002, IRH conducted a needs assessment in San Martin confirming that, for quality SDM services to be available from the MOH, providers would need to be trained in the specifics of the

method and also on basic communication and counseling skills. In addition, some of the MOH support systems (i.e., training, IEC, logistics, supervision, MIS, evaluation) would need to be strengthened or supported.

Immediately after the official project launch, ISR, with IRH support and participation, conducted a training workshop for a core group of some 18 selected MOH personnel. This first group of trainees included trainers, supervisors, technical managers, and selected providers from sites where the SDM was to be offered. The approach used to build the capacity of local MOH personnel was one of



Providers work together during a training session to practice their counseling skills.

supported training cascade: trainers themselves received training as well as guidance and support

from an ISR coordinator based in San Martin while they prepared and practiced for their upcoming training tasks. The ISR coordinator accompanied them for the first round of training activities. Also, whenever logistically possible, recent trainees would co-train with a peer at each other's sites to gain additional experience. The backing of high-level MOH officers helped make this possible.

iv. Training

The first round of training reached 103 providers from 63 facilities (56 facilities from the San Martin network and all seven from Lamas). The response to the capacity-building approach was very positive. Providers and supervisors who were now tasked with training other providers repeatedly expressed that this approach was much better than the traditional training cascades they implemented in the past; they felt relieved that they did not have to improvise. They also later reported that their peers had learned more than anyone had expected. In fact, providers' generally high technical competence was confirmed by systematic observations, including use of the Knowledge Improvement Tool [KIT] developed by IRH to assess providers' knowledge of key points about the SDM and whether they cover those key points during service delivery. MOH managers asked ISR for technical assistance on training methodology and subsequently implemented a similar "accompanied cascade" approach for other training. The positive impact of this approach greatly contributed to the perception of the whole SDM project in San Martin.

Almost two years into the project, neighboring provinces within San Martin department requested technical assistance from ISR to incorporate the SDM in their service delivery activities. MOH personnel from the original cadre of SDM trainers visited these neighboring provinces to train providers. High-level MOH officials were impressed by this achievement, and subsequent KIT observations showed that the technical competence of providers in these other provinces was good.

The project trained an additional 180 providers from 110 facilities in six more networks in the following 12-18 months. The MOH trained the remaining providers and eventually reported that a total of 705 providers from 100% of facilities had been trained. Some 13 health personnel from the San Martin police department were also trained.

Organization	Trainers trained	Providers Trained	Sites	SDM users (Sept. 02–Dec. 06)	Percent of all users
MOH San Martin	20	705	348	7,862	6

 Table 1: SDM Integration in Public Health Services in San Martin

v. Demand generation

ISR collaborated closely with managers and other personnel from the MOH's IEC department. ISR provided guidance, sample materials, and access to electronic files of illustrations, diagrams, and other resources. MOH staff designed their own strategy, developed their own materials (including radio spots in Spanish and Quechua recorded by MOH technical and administrative staff at almost no cost to the project), and implemented the strategy following regular MOH procedures. ISR provided very limited funding for some activities that had not been programmed by the MOH. The MOH carried out activities such as distribution of a flier at clinics; placement of posters in waiting rooms and MOH administrative buildings; very low-cost broadcast of radio spots by local stations; and inclusion of the SDM and distribution of materials at public events such as health fairs, immunization campaigns, and other health-related events. After notification by program staff, local media not only covered events, but would broadcast news clips repeatedly over the following days. Overall, it was a very low-cost strategy. The MOH has permanently integrated most of these activities into ongoing programming. In addition, radio broadcasts were planned for two months and then discontinued. Broadcasts took place for two additional months approximately eight months into the project.

These activities contributed to high awareness of the method. Women came to clinics inquiring about the "little necklace method" they had heard about on the radio, or seen in a poster or flier. Anecdotal information suggests that demand for the method increased following local activities such as health fairs.

vi. Integration into support systems

Logistics:

ISR worked with the logistics department of the MOH to include CycleBeads[®], client cards, and fliers in the system. All training activities for providers included a logistics component.

There have been no reported stockouts of CycleBeads or client cards in San Martin. Facility personnel order and receive CycleBeads through the same mechanisms they use for other commodities and supplies. However, IRH donated the CycleBeads currently in the system. Through late 2007. the MOH had not been able to include them in the national budget from which contraceptive commodities are procured.

Supervision:

The local ISR coordinator visited facilities where there were SDM-trained personnel to verify provision of the method, assess providers' technical competence, verify availability of CycleBeads, and oversee collection of service statistics and entry into the MIS. When logistically possible, an MOH supervisor accompanied the ISR coordinator, or ISR site visits were scheduled to coincide with typically infrequent MOH supervision visits.

The ISR coordinator reinforced providers' knowledge and provided timely feedback and clarifications. This increased providers' confidence and competence and contributed to the quality of SDM services. Although MOH supervision visits cover a broad range of topics and the SDM is not formally included in supervision instruments, IRH oriented supervisors to the key points of an SDM supervisory visit. Anecdotal information suggests that supervisors started inquiring about status of SDM services and commodities during their regular visits.

MIS:

ISR worked at several levels to get the SDM formally and functionally included in the MOH's MIS. From the beginning, ISR consulted with the MIS department on the best way to ensure the collection of accurate service statistics on the SDM. Simultaneously, ISR advocated at the

central level MOH for the approval of a "code" that would enable providers and MIS staff to enter SDM data into the system.

MIS staff participated in project training activities, all of which included a component on how to enter SDM information into the system. The ISR local monitor also inquired about reporting when he visited the MOH and providers at their work sites.

Providers recorded SDM clients from the beginning and this was reflected almost immediately and continuously in figures available from the regional MOH offices. Approximately 18 months after program initiation, a researcher not involved in the project suggested that MOH figures were not capturing all SDM clients (at the time, 70-80 new SDM users per month from the two initial networks). The head of MIS in San Martin, whom ISR had involved from the beginning of the project, took personal responsibility and during her MIS visits and interactions with new trainees, started emphasizing accurate collection and processing of SDM data. The number of reported users per month almost doubled (to 125-140) within three months and has continued increasing ever since.

vii. Overall results of introducing the SDM in San Martin

The project achieved strong demand for the method, high levels of competence of providers, full integration of the method into support systems, and very positive responses from all involved. In an early and strategically important sign of success, MOH managers from provinces neighboring Lamas and San Martin observed the successful SDM experience and requested technical assistance to replicate the SDM introduction.

The project initially planned two years for SDM introduction in the two original provinces. Before this period elapsed, neighboring provinces began to add the SDM to their services. Although MOH personnel assumed the training of other providers, authorities were unsure of adequate SDM integration into support systems in these new provinces and asked ISR to provide technical assistance for an additional 12 months, to which ISR and IRH agreed. The project officially ended in October 2005, 38 months after the initial training workshop, and 37 months after reporting the first SDM clients in the MIS. All information available at the time, including KIT assessments and reports of other monitoring visits, suggested full SDM integration into services. Almost two years after that, although ISR no longer has a presence in San Martin, MOH service statistics continue to show between 225 and 250 new SDM users every month.

viii. Results beyond San Martin

As they became available, ISR shared data and information on project advances with MOH officials in San Martin and at the central level. In fact, the response of central-level MOH authorities to this effort was most important, as they authorized and encouraged ISR to work with the MOH's other departments, offered to facilitate contacts, and publicly acknowledged that the SDM was an appropriate family planning option to include in services.

C. Developing the capacity of local organizations (2005–2007)

Following MOH authorization to scale up services after the positive results in San Martin, ISR initially considered introducing the SDM to departments with the highest maternal mortality, such as Huancavelica and Huanuco. The MOH and the USAID Mission favored this approach, as it might contribute to the national strategy to reduce maternal mortality through a reduction in unwanted pregnancies. However, poor infrastructure and other logistical considerations made it very expensive and difficult to operate there and neither the USAID Mission nor the regional MOHs for those departments could finance the necessary activities. The central-level MOH, USAID Mission, and IRH therefore agreed to expand SDM activities to MOH regions in rural and peri-urban areas of the departments of Lima, Callao, Arequipa, and Tumbes. Regional MOH directors from these areas had expressed interest in the SDM and made serious commitments to support fieldwork, which contributed to the decision regarding expansion sites.

i. Overall approach

Based on the San Martin results and available time and resources, ISR and IRH decided to follow a similar approach, but with less frequent follow-up and an overall shorter timeframe. The working assumption was that the experience gained in San Martin would allow ISR to achieve similar results with a reduced level of effort, an approach that had already been tried in the other provinces of San Martin with good results. Activities started in mid-2005 in rural and peri-urban areas of Lima and, in 2006, in Tumbes, Arequipa, and Callao.

ii. Building support and awareness

As before, regional MOH officials participated in the planning process, and their input guided project development. With assistance, the MOH included the SDM in regular IEC materials and activities, including health fairs, talks in waiting rooms, posters, and fliers. Even though radio had been the most successful IEC strategy in the first two provinces of San Martin, it would have been prohibitively expensive in the new areas, particularly in Lima, Callao, and Arequipa, so it was not used.

High-level officials were both immediately involved and gave strong support that, in turn, engendered provider support. This is particularly significant because providers in the expansion areas were more urban and technically sophisticated than those in San Martin, and included many more physicians, who can be skeptical about natural family planning methods. Demand for the method immediately after its introduction has been lower than in San Martin, which may be attributable to the lack of radio spots and a population with more exposure to other methods. However, demand is slowly growing. Almost all sites with trained personnel started reporting SDM users within approximately three months of starting services.

In each of the regions, ISR (with no direct involvement of IRH personnel) carried out a training workshop for trainers, supervisors, and selected providers, who would be tasked with training providers. Some managers and directors also participated. ISR personnel provided guidance and some support to these new SDM trainers as they prepared the initial rounds of training of providers, but did not accompany them for actual training activities.

There are more private-sector organizations offering family planning services in these areas, particularly in peri-urban Lima, Callao, and Arequipa. The project included those organizations that expressed interest and trained some of their personnel.

The regional MOHs carried through with their offers to implement training cascades. The MOH reports there are SDM-trained personnel in all facilities within the networks included in the project (not all provinces in all departments were included). IRH site visits in June 2007 to a sampling of sites confirmed this. Reportedly, most of these providers received a full, organized training workshop. Some providers in some networks attended short workshops led by their trained peers, and some only attended a presentation; but the MOH considers them all "trained". Assessment of provider competence using the KIT shows that technical competence of most providers is good.

Organization	Trainers	Providers Trained	Sites	SDM Users	SDM as % of all users
MOH Lima III**	41	422	298	670	0.7%
MOH City of Lima	0	34	126	343	0.4%
MOH Callao	28	175	50	n/a	n/a
MOH Arequipa	29	247	246	526	n/a
MOH Tumbes	36	70	42	143	0.2%
MOH Jaen	0	336	130	n/a	n/a
(Impact study control site)					

Table 2: SDM Integration in Public Health Services in other Departments

ISR also trained over 400 providers from private organizations which offer family planning in different parts of the country, including INPPARES and its network of private midwives *RedPlan*; some 12 private centers mostly in urban areas; midwives in private practice in Tumbes, Arequipa, and Lima; and over 70 health personnel from the Arequipa and Lima police forces.

ISR does not have information on the technical competence of providers from private organizations; the context in which they operate and the type of relationship with these organizations does not facilitate monitoring of their personnel or obtaining data on the number of clients that have received the SDM.

The project has trained approximately 800 health promoters in the SDM, including over 540 from the MOH.

iii. Inclusion of the SDM in pre-service teaching for health professionals

The objective of this strategy is that, in the near future, most new health professionals will have received enough information on the SDM during their pre-service education, so that upon entering the work force they are familiar with it and consider it as one more family planning option. The focus of IRH's work has been schools of midwifery. While students in some schools may receive instruction that gives them the skills necessary to actually counsel potential users on how to use the method, this is not an objective of the strategy, as counseling skills would be part

of in-service training when they join the labor force. Activities carried out for this purpose include:

- providing information on the method to faculty and providing them with tools to teach it to their students
- working with ASPEFOBST and with academic committees of individual universities to facilitate inclusion of the SDM in teaching curricula.

The SDM was included as one of the topics of a standardized minimum curriculum that all accredited schools of midwifery must cover. ASPEFOBST guided this effort, with support from Pathfinder International.

Recent updates of the teaching curricula used in several schools of midwifery formally included the SDM. A recent assessment of a sample of schools by ISR and IRH confirmed that the SDM is actually being taught to students at those schools.

University	Faculty Trained	SDM in Curricula	SDM Services in University Clinic
Universidad Nacional San Martin	18	yes	no
Universidad Católica Santa Maria	12	yes	no
Universidad Nacional de San Marcos	2	yes	no
Universidad Nacional F. Villareal	2	yes	no
Universidad Norbert Wiener	2	in process	no
Universidad San Martín de Porres	7	yes	yes
Universidad Nacional de Tumbes	12	yes	no
Universidad Nacional San Agustín	20	in process	yes

Table 3: SDM Integration in Pre-Service Education

iv. MIS

Following the model tested in San Martin, ISR worked with managers and technical personnel of the MOH departments to include the SDM in their MIS. An MIS component was part of every full training workshop.

In 2005, an update of the national MIS included the SDM, although at the time the SDM was only available in San Martin, and the codes for entering SDM information were approved for use countrywide. As for other family planning methods, there are now codes for new SDM users, continuing SDM users, and pregnancies while using the method. Visits by IRH personnel in June 2007 to a sample of facilities in Arequipa, Callao, and Lima III showed appropriate records of SDM users at all sites visited. Regional MIS staff report that monthly reports from facilities always include SDM data.

There is very little information available on SDM users from private organizations. Some of them do not keep appropriate records; others consider it confidential or privileged information, and prefer not to share it with ISR or IRH.

v. Logistics

ISR worked with regional MOH logistics personnel to include CycleBeads in their systems. All full training workshops included a logistics component.

Facilities request and receive CycleBeads through the same mechanisms as other commodities. Stock maintained at the regional level are distributed, upon request, to networks, which supply micro-networks and, finally, these supply health centers or posts. In a June 2007 visit to a sample of facilities in Arequipa, Callao, and Lima III, IRH personnel found CycleBeads available in 100 percent of facilities visited. However, some facilities had very few left, and had either not requested more or had done so in the previous 24-48 hours (possibly triggered by the announced visit).

IV. Lessons Learned

The overall goal of the project was met: the SDM is now available at facilities serving approximately six million persons, and in most of these sites it has been well integrated into support systems, creating a strong foundation for long-term sustainability of services. SDM services in San Martin show clear signs of sustainability, and MOH services recently started in other regions are making progress.

Specific strategies and approaches followed produced the desired results:

- Investing time and effort to build the foundation of the SDM service delivery system, including the cultivation of relationships with key stakeholders, eventually led to high-quality, sustainable services.
- Choosing to work with Peruvian organizations was an effective strategy and is making long-term sustainability of services possible. It is the more cost-effective and sustainable way to operate.
- Focusing on the MOH was a good choice, as the MOH proved to be a responsive partner and had the capacity to absorb and put in practice the technical assistance provided.
- The evidence generated in San Martin not only convinced central-level MOH decisionmakers, but also contributed to opening doors in other regions of the country.
- Supporting newly trained professionals tasked with training providers encouraged them as they carried out their training responsibilities and gave them the skills they needed to do a better job. This contributes to more competent providers and strengthens the training system itself.
- Engaging regularly with heads and appropriate personnel of the different technical departments facilitated integration of the method into support systems.
- Focusing on schools of midwifery for university level pre-service education promotes sustainability: universities included the method in their teaching curricula and graduate hundreds of new professionals every year who are knowledgeable about the SDM.
- Lessons learned in San Martin enabled the achievement of good results in Arequipa, Lima, Callao, and Tumbes with a somewhat lower level of effort. The higher level of effort was appropriate in San Martin for several reasons: San Martin was one of the first places in the world where the SDM was introduced to regular services, and ISR and IRH were testing

many approaches, systems, and tools. But with the knowledge and experience gained in San Martin, it is now possible to achieve similar results at a lower cost.

V. Challenges

The greatest challenge remains the central MOH's lack of commitment to purchase CycleBeads. Regional MOHs have consistently absorbed most of the actual costs of SDM activities, including personnel time, other in-kind contributions, and some expenditures using their own funds. However, the central MOH purchases all family planning commodities, so regional MOHs are not authorized to buy CycleBeads. Up to now, ISR has donated CycleBeads directly to regional MOHs, which then distribute them through their logistics systems. Despite repeated requests from technical managers in the central-level family planning/reproductive health department, the national budget has never included an allocation for CycleBeads. In fact, allocations for other family planning commodities are reduced every year in spite of increased needs.

The size of the country does not make scaling up easy. Its 29 million inhabitants are distributed unevenly in a territory of 1.25 million square kilometers. Although the transportation network is fairly good in many parts of the country, travel can be difficult, with many parts of the country relatively inaccessible. MOH operations are effectively decentralized into 26 administrative regions, and each regional MOH has a significant degree of autonomy. While this is mostly an advantage because the regions decide what initiatives to undertake, negotiating with and providing technical assistance to multiple individual regions can be a significant financial and management burden. Sustainable quality assurance can be even more difficult and expensive.

Likewise, there are 19 accredited schools of midwifery throughout the country as well as many non-accredited ones. Although working with and having the backing of ASPEFOBST greatly facilitates work, IRH has found it necessary to provide technical assistance directly to individual universities to ensure an acceptable level of implementation and quality. Again, this can be a financial and administrative burden.

Demand generation can be prohibitively expensive if using mass media. The MOH's general IEC approach (limited to posters and fliers at the point of service, community outreach, etc.) can be very low cost, but its impact on demand generation is much weaker.

Despite locally generated evidence and advocacy efforts, some important health care groups are still not convinced that the SDM should be included as an option in Peru. Physicians in general, the private sector as a whole, EsSalud (Social Security), and others are slowly moving towards acceptance of the SDM, but significant additional effort would be required for them to include the SDM in their activities.

There is great interest in working with the TDM, and ISR has the capacity to provide technical assistance to service delivery organizations, universities, and others interested in including the method in its activities. However, ISR does not have the financial resources to lead these efforts and there seems to be no local source of financing.

VI. Future Plans

The biggest next step will be to continue to build capacity within the national system so as to eliminate the need for technical assistance from IRH. As IRH's current project comes to an end, ISR may continue offering leadership for SDM and other FAB methods, but it does not have the resources to continue the work of scaling up.

Scaling up the SDM to the rest of Peru now becomes the responsibility of the Peruvian MOH and other Peruvian organizations. ISR will hold a dissemination and strategy meeting in early 2008 for key stakeholders to make decisions about future activities.

IRH will try to facilitate one of the most critical aspects of scaling up: pre-service education and in-service training of health professionals. IRH will:

- Adapt and translate into Spanish an on-line module for self-study of the SDM. This will be turned over to at least one university, which would host it in its computer system and make it available to health professionals nationwide.
- Adapt a printed self-study guide for the SDM and make it available to health professionals. Potential channels for distribution to interested professionals include the Midwifery Association through its regional branches, and/or ASPEFOBST through its affiliated schools of midwifery.
- Carry out a training workshop for in-depth training of university faculty. This would be targeted to schools of midwifery; for budgetary reasons, it would probably take place in the Lima metropolitan area.

ISR will also advocate with the central-level MOH for the inclusion of the TDM in the National Norms and Guidelines.