



USAID
FROM THE AMERICAN PEOPLE



Strengthening Health Outcomes
through the Private Sector

Bangladesh Program Profile



PROFILE

Summary: The SHOPS program in Bangladesh aimed to improve the health of women and their families through family planning and maternal and child health interventions. The two-year program (November 2011 to March 2014) comprised a mobile health component and a family planning and maternal health integrated services model. The SHOPS team provided technical assistance to the development of Mobile Alliance for Maternal Action (MAMA) Bangladesh, branded Aponjon, the first national-scale, audio-based health information service to target maternal and child health in a developing country. The team also helped integrate long-acting reversible contraceptive and permanent method services into the existing maternal and child health services of selected private hospitals. The assistance included linking facilities to a convenient source of affordable commodities, offering training to meet the needs of private providers, and assisting with marketing and demand generation. This profile presents the goals, components, results, and lessons learned from the SHOPS program in Bangladesh.

Keywords: Bangladesh, child health, contraceptives, family health, family planning, maternal health

Recommended Citation: SHOPS Project. 2015. *Bangladesh Program Profile*. Bethesda, MD: Strengthening Health Outcomes through the Private Sector Project, Abt Associates.

Cover photo: A. B. M. Zunaed

Project Description: The SHOPS project is USAID's flagship initiative in private sector health. SHOPS focuses on increasing availability, improving quality, and expanding coverage of essential health products and services in family planning and reproductive health, maternal and child health, HIV and AIDS, and other health areas through the private sector. Abt Associates leads the SHOPS team, which includes five partners: Banyan Global, Jhpiego, Marie Stopes International, Monitor Group, and O'Hanlon Health Consulting.

Disclaimer: The views expressed in this material do not necessarily reflect the views of USAID or the United States government.

Cooperative Agreement: GPO-A-00-09-00007-00

Download: Download copies of SHOPS publications at www.shopsproject.org.

ACKNOWLEDGMENTS

The SHOPS project thanks the staff at USAID/Bangladesh and USAID/Washington for their support throughout the implementation of the program. The project recognizes numerous organizations and individuals that contributed to the MAMA initiative, including the teams at Dnet—especially Ananya Rahaim—and MCC.com. Representatives from the government of Bangladesh Access to Information initiative, especially Anir Chowdhury, were instrumental in securing partner commitments and smoothing the path for this partnership. Numerous marketing and community mobilization officers tirelessly supported the project, the facilities with which they worked, and the people in their communities. A special acknowledgment goes to management and staff at facilities who worked with SHOPS to increase access to long-acting reversible contraceptives and permanent methods of family planning. Finally, SHOPS thanks Dr. A. S. A. Masud, his team, and the project’s partners for their efforts in implementing the program. Robin Keeley and Pamela Riley of Abt Associates prepared this profile.

Bangladesh Program Profile

CONTEXT

Bangladesh is a densely populated and rapidly urbanizing country with an estimated population of 150 million people living within 55,598 square miles. Current projections show the population almost doubling—and then stabilizing—after 2050 (Alauddin et al., 2010). Almost 32 percent of people live below the national poverty line (World Bank). However, the country has made significant improvements in recent years in some of the major health indicators. Under-five child mortality, for example, has decreased over the past 18 years, putting the country on track to meet its target for Millennium Development Goal Four (an under-five mortality rate of 48 deaths per 1,000 live births by 2015). The maternal mortality ratio is also decreasing, though it is still higher than Millennium Development Goal Five of 143 deaths per 100,000 live births.

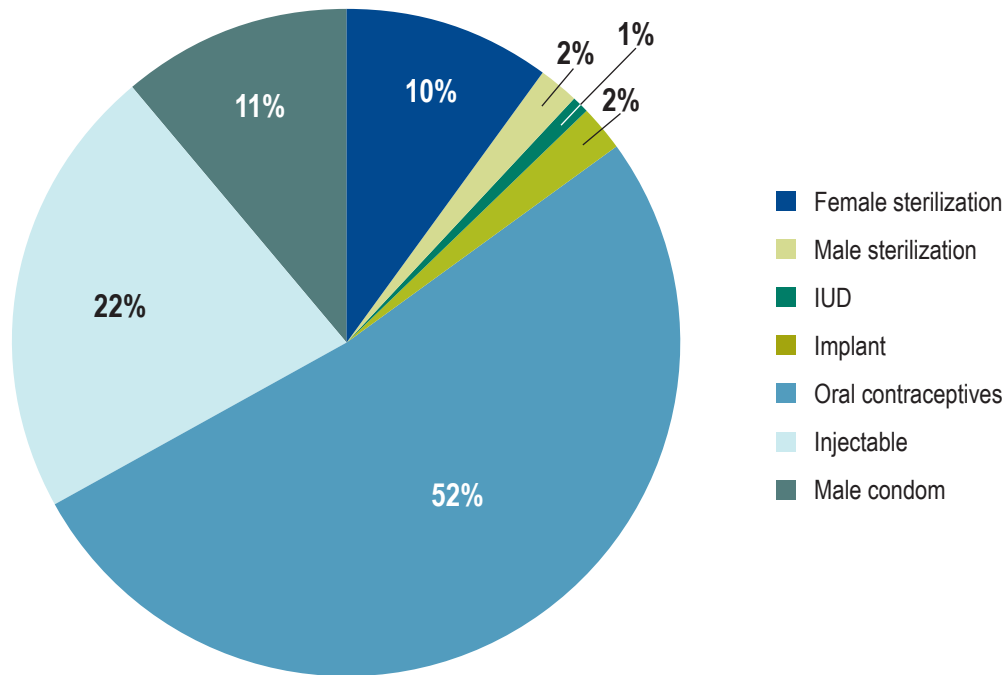
The decreasing maternal mortality ratio is aided by the increasing percentage of facility-based births, which have risen dramatically from 9 percent in 2001 to 23 percent in 2010 (Bangladesh Maternal Mortality and Health Care Survey 2001, 2010) and to 29 percent in 2011 (Bangladesh Demographic and Health Survey 2011). However, there is still much room for improvement. For example, maternal mortality figures are doubled for adolescent girls and Bangladesh has one of the world's highest rates of adolescent motherhood: almost 30 percent of girls under the age of 20 have had a child, and another 5 percent are pregnant with a first child (UNICEF, 2009). Additionally, despite the fact that 55 percent of pregnant women received antenatal care from a medically trained provider, fewer than 32 percent of women delivered with a medically trained provider (Bangladesh Demographic and Health Survey 2011).



A. B. M. Zunaed

Increasing the contraceptive prevalence rate can greatly improve maternal and child health. Use of modern methods of family planning enables women and couples to space births, delay births, avoid unintended pregnancies and abortions, and choose their appropriate family size. These methods can prevent as many as one in three maternal deaths. Through nearly 40 years of a focused family planning program, Bangladesh decreased its total fertility rate from 6.3 births per woman in 1975 to 2.3 in 2011; the modern contraceptive prevalence rate increased from 5 percent in 1975 to 52 percent in 2011 (Bangladesh Demographic and Health Survey 2011). However, as shown in Figure 1, the method mix is skewed heavily toward short-term methods. Long-acting reversible contraceptives (LARCs) and permanent methods together account for only 15 percent of overall modern method use, and LARCs alone account for only 3 percent of modern method use.

Figure 1. Method mix among modern contraceptive method users



Many women in Bangladesh marry young and complete their childbearing by their mid-to-late twenties. This leaves about two decades during which women may want to avoid pregnancy (Bangladesh Demographic and Health Survey 2011). Long-acting reversible contraceptives and permanent methods are especially well-suited for providing this type of long-term protection from pregnancy.

The government of Bangladesh is committed to decreasing the current unmet need for LARCs and permanent methods from 17 percent to 10 percent by 2016 (Directorate General of Family Planning, 2011). Recognizing that widespread access to high quality LARCs and permanent method services is not likely to be achievable by relying solely on the public delivery system, the government has identified the need for increased involvement by private sector actors in LARC and permanent method provision, including NGOs and private for-profit facilities (Directorate General of

Family Planning of Bangladesh, 2011). Accordingly, between 2010 and 2012, the government enacted a number of policy changes designed to make it easier for public and private providers to deliver LARCs and permanent method services. These policy changes included: easing requirements to facilitate postpartum female sterilization (tubectomies), permitting nurses in public and private facilities to insert IUDs, approval of a more affordable implant product (Sino-Implant II), and streamlining registration requirements for private facilities to receive family planning commodities and funds (Haque and Themmen, 2012).

More than 38 percent of family planning users obtain their method from the for-profit sector, but these are mostly short-term methods obtained from pharmacies (see Table 1). The great majority of LARCs and permanent methods are obtained through the public sector.

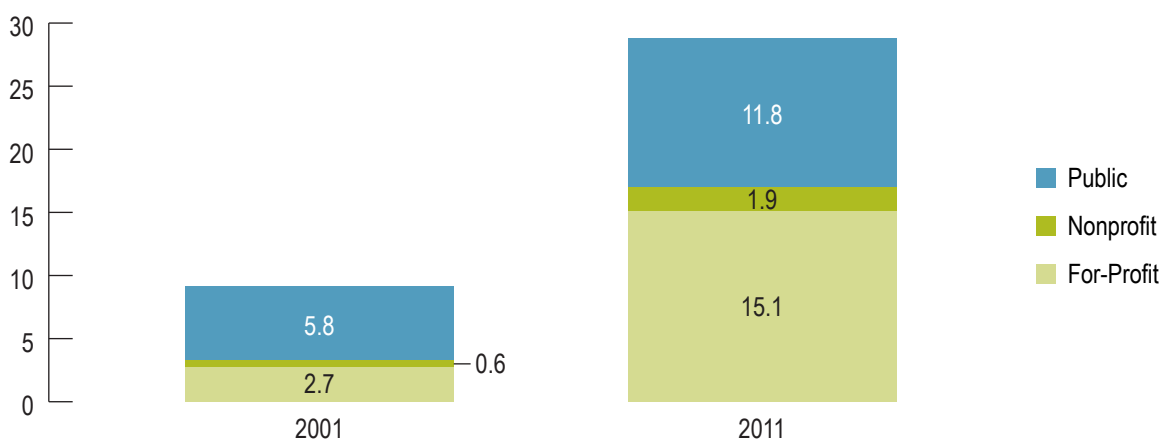
Table 1. Source of modern contraceptive methods

	Short-term methods			Long-acting reversible contraceptives/permanent methods			
	Oral Contraceptives	Male Condoms	Injectables	Implants	Male Sterilizations	Female Sterilizations	IUD
National Prevalence by Method (2011)	27%	6%	11%	1%	1%	5%	1%
Public Sector	45%	17%	66%	93%	88%	75%	89%
Private (For-Profit) Sector	45%	69%	25%	2%	4%	21%	4%
Nonprofit Sector	3%	2%	8%	5%	5%	3%	7%

Source: Bangladesh Demographic and Health Survey 2011

Figure 2 illustrates a rise in facility-based births in Bangladesh and a five-fold increase in private sector deliveries from 2001 to 2011. Fifty-two percent of facility-based births occur in for-profit facilities. There has been a missed opportunity to integrate LARCs and permanent methods into the services provided by private facilities during the postpartum period.

Figure 2. Percentage of deliveries in public, for-profit, and nonprofit facilities, 2001 and 2011



Notes: 2001 data are from the Bangladesh Maternal Mortality Survey; 2011 data are from the Bangladesh Demographic and Health Survey. The 2001 Maternal Mortality Survey reported on the place of delivery of live births and stillbirths in the three years preceding the survey, and the 2011 Demographic and Health Survey reported on live births in the three years preceding the survey.

GOALS

The goal of the SHOPS program in Bangladesh was to improve access to family planning and maternal and child health information and services through the private sector. The program had two distinct but complementary components that will be discussed in this profile.

1. Mobile Alliance for Maternal Action (MAMA) is a public-private partnership that provides stage-based information for safe pregnancy and newborn care via mobile phones.
2. The integrated family planning and maternal and child health private sector service delivery model was designed and implemented to integrate family planning and maternal and child health services in the private sector. Its aim was to increase access to LARCs and permanent methods in large private hospitals that provide a significant level of delivery services.

Timeline

2010: USAID/Washington requested that SHOPS serve as a technical advisor to a USAID initiative in the formative stages of developing a national mobile phone-based health information service in Bangladesh.

May 2011: The USAID initiative was integrated into the Mobile Alliance for Maternal Action (MAMA) Bangladesh.

October 2011: SHOPS completed a private sector assessment of long-acting and permanent methods of family planning.

November 2011: The findings of the private sector assessment led to the design of a model to integrate LARCs and permanent methods into private hospitals.

2012: SHOPS conducted research on for-profit private provider knowledge, attitudes, and practices (published in February 2013).

March 2012: LARC/permanent method training begins.

December 2012: MAMA Bangladesh was launched at a national scale.

March 2014: SHOPS program in Bangladesh ends.

Mobile Alliance for Maternal Action



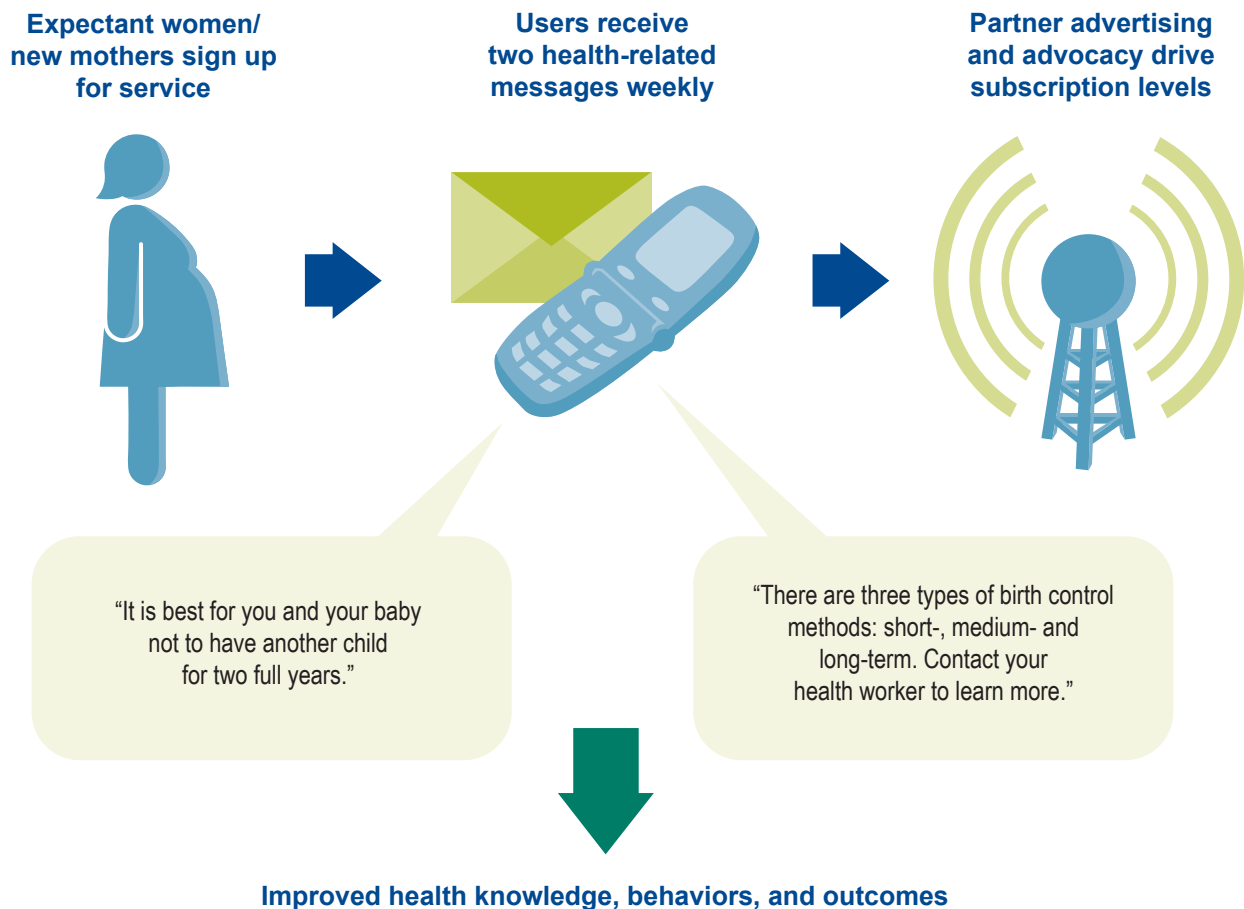
MOBILE ALLIANCE FOR MATERNAL ACTION

The SHOPS project helped design and support the initial introduction of MAMA in Bangladesh—with the brand name Aponjon—as part of the global MAMA Alliance, which is supported by the United Nations Foundation, the United States Agency for International Development (USAID), and Johnson & Johnson. The MAMA Bangladesh coalition consists of a wide assortment of private partners within a government-led program.

The Aponjon service provides health information to pregnant women who, along with their children, are at risk for complications or death during

pregnancy and childbirth. The program continues to provide health-related information to new mothers after childbirth. The service follows the expectant mother’s pregnancy and provides her and her family with messages tailored for a particular point during pregnancy or the baby’s first year of life. The messages provide evidence-based family planning and maternal and child health content about topics such as antenatal care, skilled attendants at delivery, immunizations, exclusive breastfeeding, and healthy timing and spacing of births. Subscribers receive twice-weekly messages in a voice or text format. Figure 3 illustrates the stages of this subscription service.

Figure 3. Aponjon service description



Source: Aponjon marketing material

The Aponjon service was designed to be a self-sustaining enterprise, independent of long-term donor funding. As a social enterprise with a “double bottom-line,” the service seeks to be both commercially sustainable and able to produce a measurable impact on health outcomes at national scale. Through its coalition structure, MAMA Bangladesh leverages resources and expertise from both the public and private sectors to sustain the initiative.

Implementation

The SHOPS project was closely involved in the following aspects of MAMA Bangladesh: coalition building, government coordination, content development, marketing strategy, and technology development.

Coalition building

MAMA Bangladesh was the first national-scale health information service to be launched in a developing country. It set ambitious targets: two million subscribers within three years of service launch; and sustained improvements in health knowledge, behaviors, and outcomes. To achieve these objectives, SHOPS assisted in the creation of a broad coalition of public and private partners to design, build, and sustain MAMA Bangladesh services. With the active support of the government of Bangladesh, exploratory meetings were conducted with more than 30 potential partners, including technology, media, content, health, corporate, and mobile network companies. SHOPS assisted in negotiating partner agreements and identified Dnet (a Bangladesh social enterprise) to serve as the MAMA Bangladesh secretariat. SHOPS also supported preparatory activities, including extensive user research conducted by Dnet, developing the message platform, establishing a customer service center, and training outreach partners to recruit users for the pilot service (serving more than 1,400 subscribers).

Government coordination

Public sector leadership has been essential in forming and sustaining the MAMA model. Based on initial exploratory trips in 2010, SHOPS provided an assessment to USAID confirming that MAMA goals were consistent with government priorities. The

prime minister’s office was an early and visible ally in the development of the Aponjon service, which aligned with the government’s recently launched Digital Bangladesh initiatives. USAID’s selection of Bangladesh as the first MAMA country was built upon USAID’s long-term partnership with the government of Bangladesh in maternal and child health and family planning programs.

Active support from the government of Bangladesh Access to Information initiative aided in galvanizing public and private sector partners to support MAMA. SHOPS advised MAMA Bangladesh on the creation of the Health Advisory Board, which is chaired by the minister of health. In partnership with leading maternal and child health experts from the World Health Organization, UNICEF, UNFPA, BRAC, Save the Children, and USAID, the Health Advisory Board vets and approves Aponjon message content. The Bangladesh Telecommunications Regulatory Commission helped to broker revenue-sharing agreements with mobile operations. The Ministry of Family Welfare committed to promoting the service through its health workforce, and the Ministry of Information provided support through promotion on state-owned media.



G. M. B. Akash/Panos

In Bangladesh and throughout the developing world, mobile phones offer an exceptional opportunity to improve communication and, potentially, health outcomes.

Content development

The MAMA Bangladesh Aponjon program is intended to change the knowledge and health-seeking behavior of its subscribers by serving as a trusted cue to action. SHOPS contracted with Multimedia Content and Communications (MCC), a local social business and subsidiary of Dnet, to develop the message content. SHOPS funded MCC's formative research to test the mobile messages in varying formats, durations, and topic emphasis.

Following an extensive approval process, MCC produced audio messages. Professional actors performed one-minute dramatic stories to convey the scripted health content. Ninety percent of subscribers preferred this audio format over text messages. In total, 186 messages were developed, covering 84 weeks of pregnancy and newborn care. The messages were recorded in standard Bangla, with plans to add local dialects as the service matures.

Marketing strategy

To create demand for the Aponjon service, SHOPS contracted with Unitrend, a Bangladesh advertising agency with extensive experience in social development campaigns. Based on formative research on media habits and health attitudes, SHOPS, Unitrend, and Dnet created a branding strategy and marketing campaign. The campaign focused on empowering women to make informed choices, recognizing the role of key influencers—such as husbands and mothers-in-law—when making health decisions. The marketing team chose the name Aponjon, meaning “dear one,” to represent the brand promise: accessible, timely, and trusted information. The logo (above right) represents a mother and father’s protective embrace of a baby—together forming a single unit.

Advertising campaigns using both mass media and community-based marketing events were developed to build awareness of the service. Subscriber enrollment is facilitated through community agents and other trusted intermediaries, who are critical in building subscriber capacity to use value-added services such as Aponjon.



Aponjon logo

Agreements were established with six outreach partners: BRAC, Smiling Sun Franchise Program, Save the Children Mamoni project, Dnet InfoLadies, UISCs (Union Information and Services Centers), and Ministry of Health frontline workers. These partnerships represented a potential force of more than 5,000 field agents, with possible further expansion.

Technology development

The software platform for Aponjon’s service message delivery developed in stages. Following a competitive solicitation process, SHOPS contracted with a local software company, SSD-Tech, to design, build, test, adapt, and maintain a platform to provide audio and text mobile phone messages to subscribers on a national scale.

Open-source solutions for a national scale service were not available at the time of the vendor selection, due to the existing mobile operator requirements for interactive voice services. SHOPS contracted with InSTEDD, a technology NGO, to develop a strategy for lowering Aponjon platform costs. SHOPS also facilitated extensive negotiations between Dnet and InSTEDD to deploy a test model, which had to be suspended due to uncertainties regarding platform feasibility and apportioning risk.

During the start-up phase, MAMA Bangladesh secured financial support from Grameenphone, the country’s leading telecommunication operator, to serve as the design and test partner. The exclusive relationship with Grameenphone was later adjusted to accommodate connectivity to all licensed mobile operators during the pilot phase to address the

wide variation in operator networks and policies. In a series of negotiations facilitated by the secretary of health, BTRC, and the policy advisor in the prime minister's office, Dnet reached agreement with all operators on revenue-sharing terms, waivers for registration charges, unrestricted choice of networks for family members, and billing issues. However, the variation in capabilities and features offered by competing operators required lengthy negotiations, which caused delays in launching the national service.

Results

Innovative public-private partnership

SHOPS supported the creation of the innovative MAMA Bangladesh coalition, which included a wide assortment of private partners within a government-led program: the coordinating secretariat, Dnet; technology host, SSD-Tech; content provider, MCC; corporate resource partners, Multimode and Beximco; connectivity through five mobile network operators; and six outreach organizations, all working under the leadership of the Ministry of Health and Family Welfare. Designed to balance partner contributions with partner benefits, this broad coalition brought together complementary skill sets and resources. For example, the program provided incentives for health outreach partners to assist with enrolling subscribers in the Aponjon service, visibility for the corporate sponsors, and government facilitation of technology requirements. Through ongoing support from USAID, Johnson & Johnson, BabyCenter, and the global MAMA Alliance (supported by the United Nations Foundation), the MAMA Bangladesh coalition continues to thrive, serving as a partnership model for bringing mobile health (mhealth) services to scale.

National scale technology platform

The Aponjon service, accessible through five mobile operators, was a first-of-its-kind interactive voice platform designed to meet the needs of pregnant women, new mothers, and their family members.

The platform can deliver messages that are customized for a subscriber's stage of gestation or newborn development, preferred time of day, and choice of text or audio format. By ensuring availability through all licensed mobile operators, the Aponjon service achieves maximum geographic coverage. Built-in analytics enable coalition partners to track subscription rates by geographic region, socioeconomic category, and stage of pregnancy. To support Aponjon's evolution and explore lower-cost options for voice technology, SHOPS developed technology recommendations that can be found in a 2012 report, *Technology Recommendations MAMA Bangladesh*, available on the SHOPS website.

More than 1,400 subscribers received voice messages, which addressed the health information needs of low-literacy populations.

Recorded voice messages

Voice messages address the health information needs of low-literacy populations. Extensive formative research conducted by SHOPS grantee Dnet confirmed that subscribers overwhelmingly preferred audio messages over text messages. User tests conducted by SHOPS grantee MCC revealed a

preference for dramatizations over straightforward health information. The set of messages developed, vetted, and approved by Aponjon partners was delivered to more than 1,400 subscribers in five geographic divisions of Bangladesh. During the pilot phase of service, which began in September 2011, users reported high satisfaction with this novel format and ease of use. To enhance comprehension, voice services can be easily adapted to local dialects.

Sustainable business model

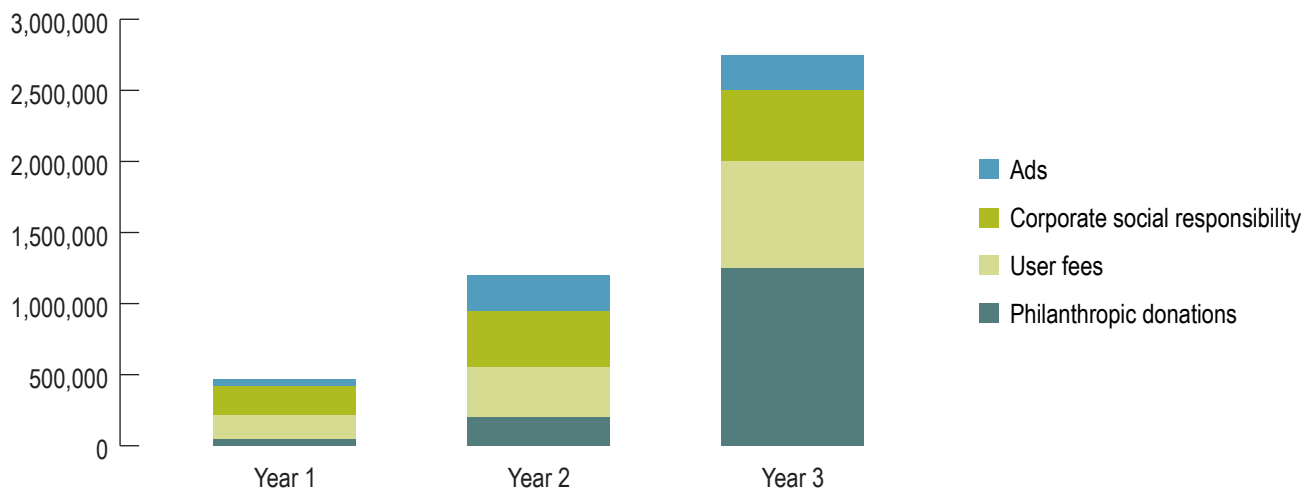
SHOPS collaborated in the development of Aponjon's first business plan (available on the SHOPS website). The total potential market was estimated at approximately 7 million women and domestic "gatekeepers," allowing for a percentage of families that lack mobile phone access. MAMA Bangladesh set a target of 2.1 million cumulative subscribers over the three-year period. To supplement donor funding, several revenue sources

were identified to meet program costs, including per-message advertising, philanthropic (“mother gift”) donations, and user fees. Based upon willingness-to-pay research during the pilot phase, user fees were set at two Bangladeshi takas, or about \$0.025, per call. Twenty percent of users in the lowest socioeconomic strata receive free subsidized service. Figure 4 shows the projected non-donor revenue sources for Aponjon.

The MAMA model sought broad corporate support to sustain Aponjon’s service. In late 2011, the U.S. ambassador to Bangladesh hosted a reception for representatives of more than 20 leading companies

to mobilize commercial sector resources for funding the initiative. SHOPS developed proposals to secure sponsorship commitments from local companies in exchange for major media exposure, visibility with international partners, and identification with a groundbreaking enterprise. Funding for the mass-marketing campaigns was supplemented with contributions of billboards, product co-branding, and other donations from corporate sponsors, including Multimode and Beximco.

Figure 4. Projected non-donor revenue increases for MAMA Bangladesh



MAMA Bangladesh today

In the two years of operation since SHOPS support ended, MAMA Bangladesh has enrolled more than one million users, including 278,000 pregnant women, 780,000 new mothers, and 96,000 family members. Over that period, the program has introduced a number of changes in response to user needs:

- A 24-hour counseling line provides Aponjon subscribers with access to a doctor for questions about safe pregnancy and child care.
- Two local dialects, Sylhet and Chittagong, have been added to the service.
- Operational changes have been made to improve the service:
 - Brand promoters have been hired and trained to supplement the outreach activities of health workers and to improve subscriber enrollment. Promoters earn commissions for registering new users in the service.
 - Although the high-cost proprietary software platform to deliver the voice messages is still in use, MAMA Bangladesh has issued a request for proposals for an open-source solution.
 - icddr,b, a Bangladesh research organization, has begun data collection for a quantitative impact evaluation.

MAMA Bangladesh introduces fee-based mhealth model

The decision of MAMA Bangladesh to charge subscriber fees for lifesaving information about safe pregnancy was controversial. Many argued that health content should be free, with service costs covered by the government, donor community, and corporate charity in order to maximize reach. Others in the partnership argued for the adoption of new business models to better sustain mhealth services, which frequently ended at the close of donor projects.

The paid subscription model had several benefits. First, the modest subscription fee (\$0.025 per message) provided incentives for mobile operators to support and market the service through a revenue-sharing agreement. Second, the service charge provided a valuable gauge of consumer satisfaction. Consumers may be more likely to pay attention to content that they pay for and less likely to continue receiving messages that they find unhelpful, dull, or irrelevant. Finally, fee-based services open up options for creating a continuum of premium value-added features—such as access to live doctor consultations—that in turn can cross-subsidize basic information services.

To address the issue of equity, the poorest 20 percent of the population received free service. Community health workers enrolling families in the service were responsible for identifying those who met the criteria for subsidized subscriptions, such as female heads of household or main providers working as day laborers.

Data published by MAMA Bangladesh in November 2014 indicate strong evidence of “willingness to pay” for credible and entertaining mobile health information, which has significant implications for sustaining mhealth interventions for underserved populations.

Lessons Learned

Understanding and adapting the program for the local context is vital. Initial plans envisioned using the universal text capability on mobile phones to provide a low-cost text service. However, information gathered during the initial assessment trip confirmed that texts would not be appropriate for large segments of the target population for several reasons: literacy rates are low among rural women; text usage is low among many female phone users; and popular low-end phones do not have Bangla language texting capability. Accordingly, the service was designed to offer voice messages as well as text options, resulting in a higher cost system.

Selection of a local organization to spearhead coalition coordination enhances partner commitment and local ownership. To reinforce country ownership and manage the service, a local organization joined as MAMA Bangladesh’s coordinating partner to guide the design and assume fiscal responsibility for operations. This secretariat function is the most important role for ensuring successful scale-up of complex coalition-based services. Dnet, a registered Bangladesh

NGO, was a fortunate choice, combining key skills and assets that may not be replicable in other countries. These assets included: a pre-existing library of original, vetted, multimedia public health content; a workforce of technology evangelists (known as InfoLadies) trained to engage new users with digital content; a suite of award-winning, sustainable social enterprises; and extensive primary research on the information needs of marginalized communities. Note that the neutrality of such a coordinating partner is a significant factor in attracting and maintaining partner commitments across sectors.

For message content, local preferences and evaluation are important in determining messaging effectiveness. During pilot testing, subscribers overwhelmingly preferred dramatizations over straight informational messages. Drama-format messages took the form of stories about couples visiting their doctor and expressing common concerns about pregnancy and newborn care. Evaluation data are needed to determine the optimal mix of topic emphasis and message repetition to impact behavior change. Due to cost considerations, messages were recorded

in standard Bangla; additional research is needed to determine the importance of local dialects in reaching populations most in need of accessible health information.

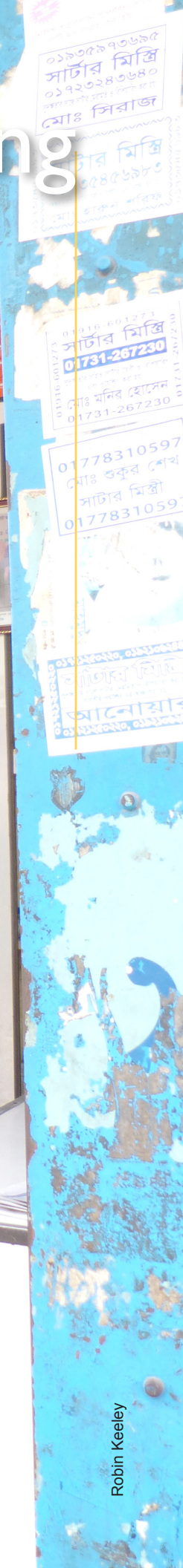
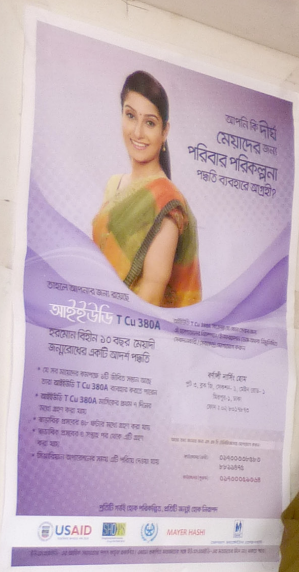
Trusted local agents are essential in marketing to the target audience. In spite of a national mass media campaign that built awareness about the new Aponjon service, self-enrollment numbers were low. The vast majority of subscribers depended upon Aponjon's outreach partner agents to help them enroll in the service. These health agents confirm a woman's interest in the service, estimate her delivery date to ensure timely messages, and enter her registration information into the Aponjon database through the phone. MAMA Bangladesh demonstrates the importance of the trusted intermediaries—such as community health workers or other agents—in registering women for unfamiliar mobile services. Recruiting, training, motivating, and rewarding outreach partners represent major costs of sustaining large-scale mhealth programs. Accordingly, marketing mhealth services to base-of-the-pyramid populations requires resources for capacity building in information technology.

Long-term sustainability includes considerations for future mobile information services. The long-term sustainability of the MAMA partnership model is still in question. User willingness to pay has been demonstrated by the more than one million subscribers who have signed up for service (including 20 percent who receive the service for free). However, the modest user fee does not cover the substantial costs of running this complex service. Corporate sponsorships remain limited: Beximco Pharmaceuticals provided financial support during the first year, and two additional companies have since been enlisted to provide in-kind marketing support. Message advertising has not yet yielded revenues. The cash flow needed to support the software platform, customer care center, and program management still depends on donors such as USAID. Ongoing donor support or financing through government programs may prove a wise long-term investment, but research is still needed to demonstrate a measurable impact on maternal and child health.



European External Action Service

Integrated Family Planning and Maternal and Child Health Services



INTEGRATED FAMILY PLANNING AND MATERNAL AND CHILD HEALTH SERVICES

SHOPS designed and implemented a program to support the integration of LARC and permanent method services into the existing maternal and child health services of selected private hospitals. This integrated services model can be successful if both supply- and demand-side challenges are addressed in a flexible way that meets the needs of individual facilities.

Implementation

SHOPS conducted a private sector assessment of LARC and permanent method services. The assessment identified four main barriers to providing these methods in the private sector and included recommendations for expanding services. SHOPS then partnered with 47 large for-profit hospitals that provide a significant number of deliveries each month to test whether LARCs and permanent methods could be integrated into existing maternal and child health services.

“Our facility owners always supported us to integrate this program in this facility. We are going to open another branch in Uttarakhan area, [and] our owners told us to integrate this program in our new branch. They always supported us to take necessary measures to integrate this program.”
– Facility administrator, Dhaka



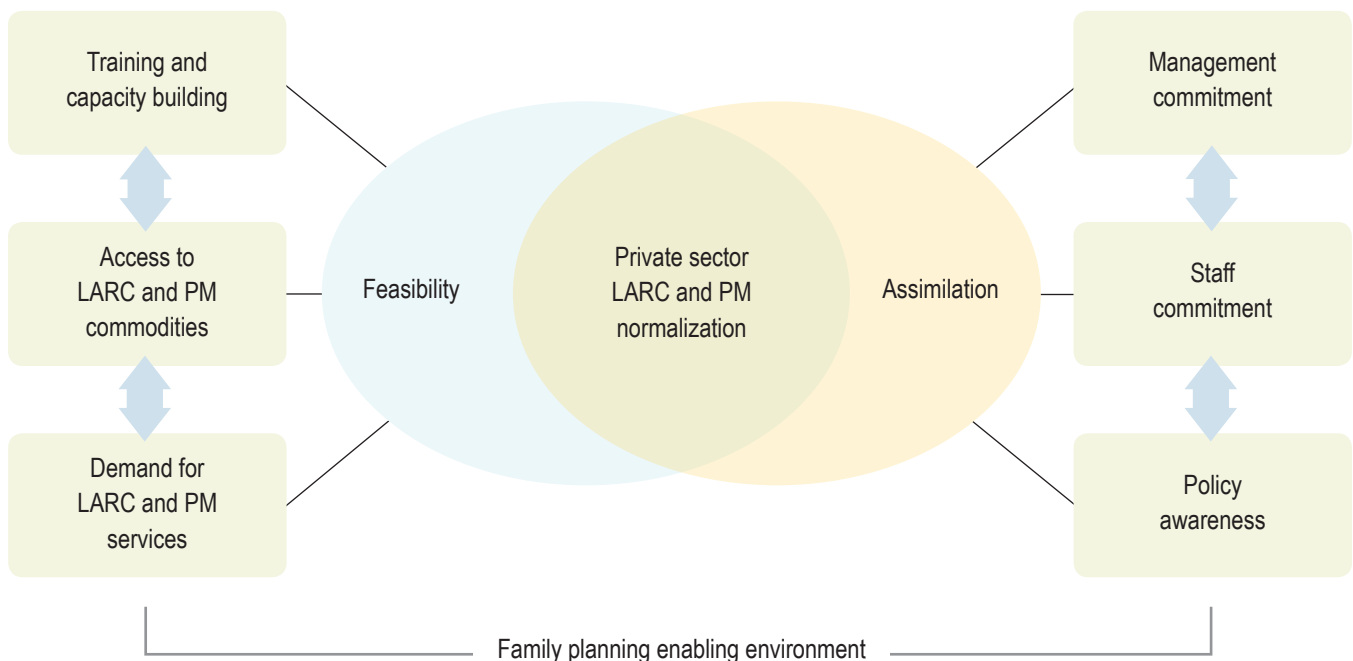
Assessment

Before initiating the program design, SHOPS conducted a private sector assessment of LARC and permanent method service provision and the barriers to expansion. The resulting report included recommendations (summarized on the following page) for identifying and prioritizing areas of support that are needed to expand these services. The assessment focused on the availability of services, the market and demand, and the supply of LARC commodities.

The assessment identified four main areas that present barriers to providing LARCs and permanent methods in the private sector: provider capacity, access to commodities, limited demand, and lack of awareness about policies and regulations.

The following figure describes the factors influencing the normalization of LARC and permanent method services in private sector facilities and how these factors fit into the process. Several factors influence the process by which integrated LARC and permanent method service delivery is made feasible and becomes normalized as an assimilated component of a private facility's existing maternal and child health offerings. The boxes on the left represent factors that the SHOPS integrated services model was designed to influence. The boxes on the right represent factors that were not directly influenced by the SHOPS project's work at the facility level.

Figure 5. LARC and permanent method services in private facilities



PM = permanent method

The assessment presented the following key findings and associated recommendations.

Skilled providers: Greater investment is needed in training public and private providers in LARC and permanent method provision—including new doctors through medical colleges—to remedy the lack of trained providers.

Recommendation: Extend training opportunities to nonprofit and for-profit providers by making the national curriculum more accessible to private providers: roll out trainings through private partners, work with private associations and other channels familiar to private providers, and integrate LARC and permanent method clinical and counseling skills into public and private medical college programs and clinical internships.

Commodities: Most for-profit providers lack access to a supply of LARC commodities that are available only through the government supply chain, which has onerous requirements for provider registration and reporting.

Recommendation: Support a commercial supply of LARC products available to for-profit providers who do not participate in the public sector supply chain or other networks. Support the role of the Social Marketing Company (SMC) to operate as a wholesaler of IUDs and implants to the for-profit sector.

Demand: LARCs and permanent methods require significant repositioning and mainstreaming in the minds of consumers and providers to achieve increased demand. This is especially true of IUDs. Lack of demand will discourage providers from offering these new services.

Recommendation: Expand demand for LARCs and permanent methods through focused promotion that targets consumers and providers. This will require a better understanding of how consumers think and act as well as of providers' current knowledge, attitudes, and practices related to LARCs and permanent methods. Promotion should target health provider behavior change and include the integration of postpartum IUDs and tubectomies at high-volume private sector maternity providers; it should also include strategic communication activities targeted to consumers.

Policy environment: There is a significant lack of awareness and misunderstanding of the policies and regulations affecting private providers' and facilities' delivery of LARC and permanent method services.

Recommendation: Improve communication and orient private providers on LARCs and permanent methods, certification policies, and social requirements.

Stephen Rahaim



Medical interns learn how to insert an implant by watching the procedure being done on a patient.

Design

Based on the private sector assessment, SHOPS designed an integrated service delivery and business model to improve the viability of private facilities in providing LARCs and permanent methods. SHOPS partnered with 47 large for-profit hospitals in Dhaka and Chittagong that provide a significant number of deliveries each month to test whether, and how, LARCs and permanent methods could be integrated into existing maternal and child health services. The model took advantage of the growing number of deliveries in these facilities and focused on the postpartum period, during which many women are interested in family planning to space their next pregnancy or to limit their

childbearing. Family planning was also integrated as appropriate into other maternal and child health services, such as immunization and antenatal care.

Quality assurance was integrated into existing facility systems to minimize investment costs. The central component of this integrated approach to quality assurance was to establish a focal point in each facility—typically the most senior obstetrician/gynecologist (ob/gyn) or the head of the department. The quality assurance focal point was trained in multiple areas, including infection prevention protocols, counseling and screening clients for all methods, and managing proper completion of informed consent forms and client service records.

Improved family planning access in private hospitals

Jahanara, an 18-year-old mother of two (ages two years and three months), was married to a rickshaw puller at the age of 13 and works as a house servant to support her family. When Jahanara took her baby to a routine vaccination appointment at Shaheed Monsur Ali Medical College Hospital, she met Tanjina Chowdhury, a marketing and community mobilization officer with the SHOPS project who provides family planning information and counseling to clients waiting for maternal and child health services.

Jahanara told Chowdhury, “[I do] not know anything about family planning. No one has ever explained to me why family planning methods could be essential for my family and why marrying at an early age is undesirable.” Tanjina explained the importance of family planning and discussed several family planning methods and the advantages and disadvantages of each. She gave Jahanara leaflets on family planning methods and her card, so she could contact her with further questions on family planning.

A week later, Chowdhury received a call from Jahanara expressing interest in learning more about family planning, but saying that her husband was not interested in the topic. Chowdhury visited Jahanara and her husband at home and explained to him that two children was an ideal number for a family and that, to better support their children and to protect his wife’s health, they should consider using a family planning method. Chowdhury introduced them to one of their neighbors, a middle-aged woman who had used a family planning method after her first pregnancy. After listening to her story, Jahanara’s husband began to understand the positive effects of family planning. He supported Jahanara’s decision to start using an IUD and willingly gave her some money toward its cost.

Three months after receiving her IUD, Chowdhury made a follow-up visit to Jahanara and found her in good health and without complications. Jahanara and her husband are very happy with their decision to use the IUD as it allows them to better plan for the future of their family.

SHOPS implemented the integrated services model in collaboration with three partner organizations:

- The **Social Marketing Company**, a nonprofit social marketing organization, is one of the largest distributors of family planning and child health products (including IUDs and implants) in Bangladesh. In the absence of a commercial market for IUDs and implants, SMC's role was to sell commodities donated by USAID to the participating private facilities. SMC was also tasked with helping facilities develop a regular supply of IUDs and implants and developing a mass marketing campaign for these methods.
- The USAID-funded **Mayer Hashi project** has extensive experience in Bangladesh, working with public, NGO, and a limited number of for-profit facilities, to build their capacity in LARC and permanent method service provision. On the SHOPS project, Mayer Hashi led the adaptation of the national LARC and permanent method training curriculum to make it more responsive to private providers' time constraints, more practical, and interactive. Using the revised curriculum, Mayer Hashi led the training of doctors and nurses from for-profit private hospitals on LARC and permanent method clinical and counseling skills and infection prevention.
- **AITAM Welfare Organization** is a well-known Bangladeshi health training organization with a team of respected ob/gyn trainers. AITAM took responsibility for training private providers at medical college hospitals on LARC and permanent method services. An in-facility training of trainers program was developed, which made the training more convenient for private providers and less disruptive to their normal schedules and duties.

“We have very good relations with SMC. Whenever we call them, they take immediate action and they are easy to work [with]. Sometimes we purchase commodities individually for our other facilities from SMC. Whenever we call them, they just supply it immediately.”

– Facility focal point, Dhaka

SHOPS also worked to ensure that the key stakeholders in the country responsible for family planning provision were engaged from the beginning. Key stakeholders included:

- The **Directorate General of Family Planning** within the Ministry of Health and Family Welfare, particularly the Clinical Contraceptive Service Delivery Program
- The **Obstetrical and Gynecological Society of Bangladesh**, a leader and influencer among ob/gyns in the country
- The **Directorate General of Health Services**, an agency of the Ministry of Health and Family Welfare

Facility engagement

The SHOPS partners developed a set of criteria for selecting facilities and providers to receive training. After assessing 83 facilities, SHOPS selected 50 for participation, and each signed a memorandum of understanding with SHOPS. However, recurring general strikes forced the project, in coordination with USAID, to revise the target number of facilities to 35. By the end of the project, 47 facilities received training, and 38 of these were supplied with commodities and started providing services.

After selecting an eligible facility, SHOPS entered into a discussion with the facility owners and

management to develop a memorandum of understanding. This process entailed discussion and documentation of the level of commitment on the part of the facility, the benefits anticipated from participation, and the specific needs of the facility—including how the model would be adapted for that facility.

Memorandum discussions with facilities were tailored to the unique needs of each facility as a health business. This approach to relationship management was essential to the success of the model.



Female ob/gyns at Obstetrical and Gynecological Society of Bangladesh Maternity Hospital, which was supported by the SHOPS project.

Stephen Rahaim

Facility training

Prior to commencing training, SHOPS conducted a knowledge, attitudes, and practices study among 385 nurses, general practitioners, graduate doctors, and ob/gyn specialists working in private for-profit facilities in three areas: Dhaka district, Chittagong City Corporation, and Tongi (a town close to Dhaka). This research resulted in a 2013 report, *Assessment of Private Providers' Knowledge, Attitudes, and Practices Related to Long-Acting and Permanent Methods of Contraception in Bangladesh*.

“All our doctors know about long-acting and permanent methods and other family planning methods theoretically. The SHOPS training refreshed our knowledge and created opportunity to learn practically.”

– *Ob/gyn department head, Dhaka*

The knowledge, attitudes, and practices study found that private providers had limited awareness of the benefits and methods associated with LARCs and permanent methods. Respondents showed:

- **Inaccurate information about method-specific side effects.** Forty-five percent of ob/gyns gave one or more incorrect responses about side effects for implants; those numbers were even higher for injectables (54 percent) and tubectomies (79 percent). Results were similar for general practitioners.
- **Bias against IUDs, implants, and tubectomies.** About half of respondents said that IUDs and implants have “too many or too adverse side effects,” and about a third said the same about female sterilization, indicating that some providers' attitudes toward specific methods can reflect poor technical knowledge.

“The practical training is a good opportunity for me. Before, students only learned if they were interested, now everyone gets the [practical LARC and permanent methods] training.”

– *Medical intern, Dhaka*

- **Poor technical knowledge and skill.** Among general practitioners who have never been trained in LARC and permanent methods, 55 percent felt competent to insert an implant, 37 percent felt competent to insert an IUD, and 30 percent felt competent to perform a tubectomy. Nevertheless, a high percentage interviewed claimed they were providing these methods (55 percent). These respondents demonstrated a poor level of technical knowledge, as indicated by their responses to the questions about method-specific side effects.

Building on the findings of the study, SHOPS developed a comprehensive training program tailored to the needs of private providers. The training was adapted from the national LARC and permanent method curriculum to be shorter in duration and more focused on relevant practical clinical skills and experience.

The original national curriculum is an intensive, 21-day training program on vasectomies, tubectomies, IUDs, and implants. Mayer Hashi developed a shortened modular version of the curriculum for each LARC and permanent method so that training sessions could be held at different time periods and providers could focus on the specific methods they selected to add to their facility services. This revised curriculum was certified by the Obstetrical and Gynecological Society of Bangladesh and approved by the Bangladesh Directorate General of Family Planning. To make participation more attractive, training sessions for private medical college hospitals were conducted in their facilities to reduce the time providers needed to be away.

A LARC and permanent methods practicum was introduced into medical college hospitals, targeted for medical students and interns. Previously, only classroom training was included as part of the reproductive health curriculum, except in the ob/gyn specialty. Nurses in these facilities were trained in family planning counseling and reporting as well as in commodity-supply needs.

To address provider bias, SHOPS introduced evidence-based medicine roundtables designed to overcome common misconceptions. The roundtable format provided a peer-based discussion setting with a trained facilitator. Attendees received the most recent evidence-based knowledge regarding a specific topic (such as return to fertility after implant use). The facilitator then led a discussion on the topic to help dispel some often long-held erroneous beliefs.

Developing service capacity for long-acting reversible contraception and permanent methods

At the Medical College for Women and Hospital in Dhaka, students and intern doctors had the opportunity to study modern family planning methods for the first time since the college was established 20 years ago. Bangladesh's medical college curriculum requires graduating doctors to have adequate family planning service-delivery skills, but a lack of skilled faculty members has been a major impediment to teaching these clinical skills. Hospital director Dr. Abu Altaf Hossain summarized, "We could not fulfill clients' demand for [long-acting reversible contraception and permanent method] services [previously]. The capacity building and service promotion support has enriched our hospital to fulfill clients' demand for the family planning services."

For example, one patient the SHOPS team heard about, Rahima Begumm, was interested in using a LARC or permanent method, but her regular doctor, who is a faculty member of the college, did not have the skills to provide this service. After participating in the SHOPS program, her doctor had the knowledge to provide the service and access to the needed commodities. Begumm received an IUD and was happy that she was able to obtain this service from her preferred doctor.

Support services

In addition to improving their clinical skills, facility management and providers received support in three other areas: understanding the policies and regulations for provision of LARCs and permanent methods, commodities supply, and marketing.

Policy and regulatory environment

SHOPS conducted business-enabling workshops to update participants on policy and regulatory requirements for integrating LARC and permanent method services into their facilities. These workshops, held in each participating facility, helped participants develop a LARC and permanent method business plan that included issues such as setting appropriate service fees, contraceptive forecasting, and marketing and demand generation. A cross-section of all staff involved

in the integrated services model attended the workshops, including senior management, family planning service providers, pharmacists, marketing staff, management information system staff, administrators, and account staff.

Commodity supply

Private providers lacked a regular supply of IUDs and implants other than the government commodity system, which has onerous requirements for registration and reporting. SHOPS partner SMC received donated IUDs and implants to establish a supply for private facilities.

SHOPS worked with SMC, the Directorate General of Family Planning, the drug administration, and USAID to obtain permission to distribute these products and set a maximum retail price. The

project then helped each of the facilities connect and develop a relationship with SMC to begin the process of continuous supply ordering.

Marketing and demand

At each facility, SHOPS developed a multifaceted demand generation strategy tailored to the facility's needs with the following components:

- **Marketing and community mobilization officers.** These officers operate like field workers to help generate demand and to facilitate referral networks, working with several trained facilities within a catchment area. Over the life of the project, marketing and community mobilization officers made contact with 34,766 potential clients, providing them with family planning information and referrals for counseling and services.
- **Complementary print materials.** These counseling tools included method-specific information developed to help promote LARC and permanent method services, as well as the facilities providing these services.
- **Family planning corners.** Facilities received assistance with creating small, private spaces for distributing family planning materials, where trained nurses could counsel women, men, or couples on their family planning options.

“[A couple] who live near me contacted me about how to find family planning in their area. They had two children and wanted to use family planning. The wife was sick and ... because of this, the husband did not think his wife should use family planning. I talked to the husband about vasectomy. He wanted to speak to doctor about it so I connected them to a specialist and he helped the husband decide to get a vasectomy.”

— *Marketing and community mobilization officer, Dhaka*

Making information available to male and female clients

Amirul Islam, a businessman, has two children, 12 and 9 years old. He and his wife believe that a small and planned family is best. Accompanying his wife to the Medical College for Women and Hospital, Islam discovered the family planning corner and approached Sahida Akter, the facility's marketing and community mobilization officer from the SHOPS project. The Islams requested family planning suggestions. Akter responded that it was up to the couple to decide on the method of family planning that was best for them, explaining the advantages and disadvantages of each method and giving them brochures and leaflets on all family planning methods.

The couple later met with a family planning doctor at the hospital to ask about no-scalpel vasectomy. The doctor explained the method in detail and reassured them that there were no major disadvantages to the method and that the procedure would not cause impotence or loss of sexual pleasure for the male. Islam went forward with receiving the method and has not faced any complications.

Results

Long-acting reversible contraception and permanent method training

SHOPS trained providers in 47 facilities in at least one new LARC or permanent method service (Table 2). In addition, skills transfer was initiated in medical college hospitals with 243 medical students and 153 intern doctors receiving skills-building training in LARCs and permanent methods.

Table 2. Facilities and providers trained by method type

Method	Number of Facilities Trained	Number of Providers Trained
Implant	47	155
IUD	46	151
No-scalpel vasectomy	19	49
Tubectomy	15	23

Facility service delivery performance

To determine the contribution to LARC and permanent method service delivery provided by private facilities with which SHOPS was working, the project regularly compared the per-facility average of each method being provided with the per-facility average of public and NGO facilities in the same districts of Dhaka and Chittagong. Project data were collected from the SHOPS management information system and public and NGO data were collected from the Directorate General of Family Planning district management information system. The data show that, although SHOPS facilities began providing all services in which they were trained over the course of the project—even exceeding the numbers of tubectomies being performed compared to public facilities—overall use of LARCs and permanent methods was very low. Lack of demand for these methods in both the public and private sectors is a large issue that will continue to constrain private provision of LARCs and permanent methods.

Evaluation

To better understand and document the lessons and successes of the LARC and permanent method integrated services model, SHOPS conducted a process evaluation to identify factors that could support or impede LARC and permanent method provision in private facilities beyond the program's

lifetime. The evaluation used a qualitative case study approach in a focused exploration of five Dhaka-based facilities that had a range of implementation outcomes.



Stephen Rahaim

A marketing and community mobilization officer gives family planning educational materials to mothers waiting at a school for their children.

Lessons Learned

Integration of LARC and permanent method services into existing service offerings is an effective way to lower the barriers to private facilities.

To minimize additional costs and disruptions in facilities and to reduce barriers to market entry, the SHOPS program integrated LARC and permanent method services into existing maternal and child health services, particularly into antenatal and delivery services and child health visits. In providing assistance with training, marketing and demand generation, and commodity supply, SHOPS helped reduce market entry barriers to LARC and permanent method services. Consequently, facility administrators were encouraged to consider adding these services to broaden the method mix offered in their facilities. This approach leveraged the existing client base, staff skills, and infrastructure that were already in place.

Behavior change and demand generation are important elements when adding new services.

Overall demand for LARC and permanent method services in Bangladesh, whether at private or public facilities, is very low. Behavior change for both consumers and providers is needed to help overcome method-related biases and to increase demand. Social and behavior change communication by means of mass media, community engagement, mobilization and community messaging, and interpersonal communication is critical. Without sufficient demand, the providers who were recently trained in delivering LARC and permanent method services risk losing their skill and confidence, potentially negating the effectiveness of the training.

Integration of services into facilities, capacity building of providers, community level demand generation activities, and referral to trained providers are all important components to promote uptake of services. This mix is particularly germane to private facilities, as they may discontinue offering underused services that are not generating income.

Private facilities are not well-positioned to address the problem of low consumer demand. Although the marketing and community mobilization officers performed extensive research dedicated to LARC

“When SHOPS assistance will not be here, there may be reluctance among us [to continue]. Now whenever the marketing and community mobilization officer visits us, we feel encouraged; they always [check in on] us and follow up [with] us. That thing will be missing. We need at least five to ten years’ support in training, marketing, promotion, and community-level promotion for sustainability of [the] long-acting and permanent methods program in our country.”

– *Facility focal point, Dhaka*

and permanent method promotion, by the end of the project none of them had been hired directly by facilities to continue in this role. It is unlikely that existing marketing teams at facilities can put the same emphasis on LARCs and permanent methods, which will present an ongoing challenge to the provision of LARC and permanent methods in private facilities.

Availability of a commercial supply of LARC commodities helps integrate services in private facilities.

There were limited options for private facilities to obtain IUDs and implants in Bangladesh. While these commodities were available from the government system, its onerous reporting and paperwork requirements deterred private facilities. The SHOPS evaluation found that the commodity gap was one of the key reasons that facilities did not provide LARC services. Helping facilities develop a relationship with SMC and working to ensure the availability of IUDs and implants were key elements in integrating services into these facilities. Additionally, SMC’s willingness to provide even small quantities of commodities to facilities

creates the potential for individual private providers or small private clinics to access a reliable supply of affordable commodities, enhancing their ability to offer LARC services.

Engagement of facility owners is needed to successfully integrate services into a private facility.

Large private facilities in Bangladesh vary in their ownership and management structures. Some owners are very involved in day-to-day operations, and some are involved only in significant decisionmaking. The integrated services model was designed to engage each facility as a unique health business with specific needs and issues. SHOPS had to understand and navigate the different decisionmaking processes of each facility to gain support and commitment for implementing the model. Moreover, the process evaluation showed that in facilities where there was less administrator or owner engagement, staff did not have the support they needed to expand or market service provision. These facilities were accordingly more dependent on SHOPS support (especially on marketing and community mobilization officers), which has negative implications for sustainability. This is an important consideration for any future plans to scale up the model.

Adaptation of training curricula for private providers is important to engage them.

It is important that private providers have the opportunity to attend in-service training events to gain or update their clinical knowledge. However, training opportunities are often not easily accessible for private providers because they may be distant from their facilities, held during peak business hours, or require long periods of time away from their clinics. Private providers have limited time to dedicate to training because they need to generate income for their facilities. In large private facilities, the administration may also be hesitant to allow their providers time away from their duties at the facility. SHOPS trainings emphasized the practicum and minimized the in-class didactic material to shorten the training sessions, while still maintaining the quality. Additionally, on-site training was used in medical college hospitals; providers were able to take less time away from their patients while practicing skills in their regular work environment.

Provider turnover affects the ability of facilities to sustain LARC and permanent method provision.

In Bangladesh, it is common for providers to work in multiple facilities simultaneously, across both the public and private sectors. Accordingly, provider turnover can be high as providers find work in a different facility with better hours or pay. The evaluation found that this can have an impact on LARC and permanent method service provision. When providers leave a facility, they take their skills with them. Medical college hospitals seem to be less vulnerable to this turnover than private for-profit hospitals, due to their internal training and skill-renewal capacity. In two cases examined in the evaluation, provider turnover affected the facilities' capacity to deliver services. Though they had other doctors who could be trained, the facilities did not seek this training or hire new doctors who already possessed skills in LARC and permanent method service delivery, showing that the facilities were not completely committed to long-term provision of such services. However, this can also mean that new facilities can take advantage of engaging a provider trained in these methods. In fact, in two cases, facilities that had engaged a trained provider approached SHOPS for additional assistance in incorporating these services into their facility.

CONCLUSION

Improving and ensuring the health of women and their families through family planning and maternal health interventions are important issues in Bangladesh. With support from USAID/Bangladesh and USAID/Washington, SHOPS was able to play a critical role in two programs: the development of MAMA Bangladesh and the integration of LARC and permanent method services in large private hospitals.

MAMA Bangladesh is a pioneering venture as the first national-scale, audio-based health information service to target maternal and child health in a developing country. Based on seed funding from its founding donors and MAMA's vision, Aponjon was designed by local institutions that had in-depth knowledge about the values and culture, technology use, and barriers to better health for women in Bangladesh. Under active government stewardship, a diverse set of partners joined together, recognizing the potential benefits of Aponjon and committing to share its costs. By carefully documenting the initial assumptions and changes along the way, SHOPS seeks to share implementation lessons for future program developers.

SHOPS found that large private hospitals, particularly medical college hospitals, are willing to incorporate new service offerings such as LARCs and permanent methods into their facilities, given the right motivations and assistance. However, even with this willingness, certain improvements are needed in the external environment, including increased demand for services and linkages to affordable commodities. (This was made clear in the two facilities that tried to integrate the model into their facilities independent of the project impetus, after hiring a SHOPS-trained provider.) Challenges remain, particularly in personnel and skill retention and in promoting demand for and awareness of LARC and permanent method services. Nevertheless, the results of the SHOPS project in Bangladesh show that the private sector can make a valuable contribution to improving the availability of LARC and permanent method services.



Stephen Rahaim

A community pharmacy in Bangladesh.

REFERENCES

Alauddin, M., G. Bowers, G. Lewis, and B. Ravenholt. 2010. *USAID/Bangladesh: Population and Family Planning Program Assessment*. Global Health Technical Assistance Project.

Directorate General of Family Planning of Bangladesh. 2011. *Improving the Uptake of Long-Acting and Permanent Methods in the Bangladesh Family Planning Program: National Strategy 2011–2016 (Final Draft Report)*.

Haque, N. and Themmen, E. 2012. *Achieving Positive Policy Changes for Family Planning in Bangladesh*. New York, U.S.: RESPOND Project, EngenderHealth.

National Institute of Population Research and Training, MEASURE Evaluation, and icddr,b. 2012. *Bangladesh Maternal Mortality and Health Care Survey 2010*. Dhaka, Bangladesh: NIPORT, MEASURE Evaluation, and icddr,b.

National Institute of Population Research and Training, Mitra and Associates, and ICF International. 2013. *Bangladesh Demographic and Health Survey 2011*. Dhaka, Bangladesh and Calverton, MD, U.S.

National Institute of Population Research and Training, ORC Macro, Johns Hopkins University and icddr,b. 2003. *Bangladesh Maternal Health Services and Maternal Mortality Survey 2001*. Dhaka, Bangladesh and Calverton, MD, U.S.: NIPORT, ORC Macro, Johns Hopkins University, and icddr,b.

UNICEF. 2009. "Maternal and Neonatal Health in Bangladesh." Accessed April 15, 2014, http://www.unicef.org/bangladesh/Maternal_and_Neonatal_Health.pdf.

World Bank. "Poverty headcount ratio at national poverty line (% of population), data for 2010." Accessed January 2, 2014, <http://data.worldbank.org/indicator/SI.POV.NAHC>.

The Strengthening Health Outcomes through the Private Sector (SHOPS) project is a five-year cooperative agreement (No. GPO-A-00-09-00007-00) funded by the U.S. Agency for International Development (USAID). The project focuses on increasing availability, improving quality, and expanding coverage of essential health products and services in family planning and reproductive health, maternal and child health, HIV and AIDS, and other health areas through the private sector. SHOPS is led by Abt Associates Inc., in collaboration with Banyan Global, Jhpiego, Marie Stopes International, Monitor Group, and O'Hanlon Health Consulting. The views expressed in this material do not necessarily reflect the views of USAID or the United States government.

For more information about the SHOPS project, visit: www.shopsproject.org



Abt Associates Inc.
4550 Montgomery Avenue, Suite 800 North
Bethesda, MD 20814 USA
Telephone: 301.347.5000 • Fax: 301.913.6019
www.abtassociates.com