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SHOPS
Strengthening Health Outcomes *through* the Private Sector

India Program Profile

PROFILE

Summary: The Strengthening Health Outcomes through the Private Sector (SHOPS) project implemented a three-year program in India, funded by the United States Agency for International Development, from September 2012 to September 2015. The program built on market-based approaches developed and tested in the USAID/India-funded Market-Based Partnerships for Health project. It had three overarching goals: (1) refine and scale up three commercial sector partnership models for improving access to, and use of, health products among base-of-the-pyramid populations; (2) implement an improved tuberculosis treatment model that connects the public and private health sectors with communities; and (3) continue supporting the Dimpa network, scaling up successful and innovative components across the network. This profile presents the goals, components, results, and lessons from the SHOPS program in India.

Keywords: advanced cook stoves, child health, contraceptives, diarrhea, DMPA, family planning, India, injectables, market-based partnerships, maternal health, public-private partnerships, reproductive health, tuberculosis, zinc

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Project Description: The Strengthening Health Outcomes through the Private Sector (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.

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India
Program Profile

CONTEXT

India is home to more than 1.2 billion people and is one of the fastest-growing economies in the world, with an annual gross domestic product growth rate of approximately 5 percent. The thriving private sector contributes to this trend, with an overall growth rate of 14 percent (International Institute for Population Sciences, 2012). The private health sector—defined as health care providers, suppliers, and ancillary and support services that lie outside the public sector—includes commercial for-profit entities, nonprofit organizations, informal vendors, and a growing number of private medical practitioners. This sector is valued at $40 billion (World Bank). The National Sample Survey Office estimates that the private health sector in India provides nearly 80 percent of outpatient care and about 60 percent of inpatient care, noting that as much as 40 percent of this private care may be delivered by informal or less-than-fully qualified providers (Ministry of Statistics and Program Implementation, 2004).

Alongside its large private health sector, India has a resource-strapped but well-structured universal health care system, run by constituent states and territories in collaboration with the Ministry of Health and Family Welfare. However, a marked rural-urban imbalance limits health care access in rural India—a skewed 1:4 ratio of available rural providers to those in urban areas. Poor health regulatory mechanisms, non-adoption of clinical and health care standards, and weak accreditation norms in the public and private sectors often result in irrational treatment, weak health care management, and ultimately poor health outcomes. The under-5 mortality rate stands at 53 per 1,000 live births, and the maternal mortality rate is 190 per 100,000 live births (World Health Organization, 2013). The annual incidence of tuberculosis (TB) is 171 per 100,000 people (World Health Organization, 2014). Thirty-eight million couples have an unmet need for contraception, and 1 million people die annually due to indoor air pollution (World Health Organization, 2010).

Since the public sector alone cannot address all the health needs of the growing population of India, partnerships with the private sector have emerged as a key strategy. USAID/India has a long history of supporting private sector initiatives to address poor health outcomes using market-based partnerships (MBPs). These partnerships focus on providing essential health products and services for low-income consumers and represent a potential solution for bringing the strengths of the private sector to meet unmet public health care needs. In this model, private sector entities formally collaborate to improve the regulation, finance, or delivery of health activities, in partnership with other private and public entities. In particular, MBPs leverage the private sector to improve distribution, marketing and promotion, and product development.

While the large and rapidly growing private sector in India already contributes substantially to health goals, it has not addressed certain market gaps that result from low demand (from consumers or providers) or from high cost (of logistics or demand creation). These gaps create challenges for MBPs: for example, ensuring last-mile distribution in rural and remote areas and promoting best practices in public health among fragmented groups of private providers.

From 2008 to 2012, USAID/India funded the Market-based Partnerships for Health (MBPH) project, a bilateral program implemented by Abt Associates.

It was designed to overcome such market gap challenges. The four-year project developed and pilot-tested seven last-mile distribution and private provider models that aimed to better serve base-of-the-pyramid populations in India. An independent evaluation of the MBPH project concluded that all partnership models demonstrated some degree of viability and potential for scale-up and sustainability.

GOALS

To build on the strong MBP foundation developed by MBPH, USAID invested in the Strengthening Health Outcomes through the Private Sector (SHOPS) project to improve and scale up five of the seven market-based models designed and piloted under MBPH (Table 1). The three overarching goals of the SHOPS project related to improving the five models:

1. Refine and scale up three commercial sector partnership models for improving access to, and use of, health products among base-of-the-pyramid populations: the ITC e-Choupal rural health initiative, the PharmaSynth ORS and zinc rural health initiative, and the advanced cook stoves (ACS) initiative.
2. Improve and implement a model for TB treatment that connects the public and private health sectors with communities, and encourage the government's Revised National Tuberculosis Control Program (RNTCP) to adopt the model.
3. Continue supporting the Dimpa network in Uttar Pradesh to expand access to injectable contraceptives, scaling up successful and innovative components across the network.

The five models shared four objectives: (1) sustainably bridge the existing gaps in supply and demand, (2) improve access to important health services and products, (3) build salience among owners who will sustain the work after the project ends, and (4) serve base-of-the-pyramid populations in urban and rural India. The five SHOPS models were implemented in the states of Karnataka, Madhya Pradesh, and Uttar Pradesh (Figure 1).

Figure 1. SHOPS implemented five models in three states of India

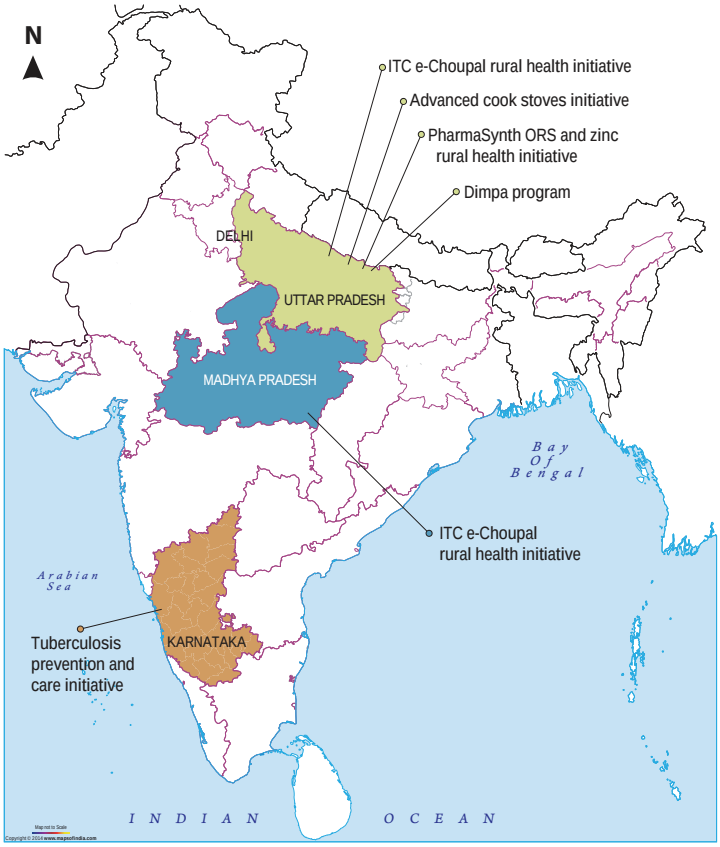


Table 1. SHOPS scaled several predecessor programs to cover 25 million people in India

Model	Population benefited under SHOPS project
1. ITC e-Choupal rural health initiative	1.2 million
2. Advanced cook stoves initiative	0.2 million
3. PharmaSynth ORS and zinc rural health initiative	3.0 million
4. Tuberculosis prevention and care initiative	16.8 million
5. Dimpa program	3.7 million (married women of reproductive age)
Total population benefitted	**24.9 million**

Steve Evans

Program Timeline

September 2012: Launch program

February 2013: Implement market survey of potential products for the ITC basket

April 2013: PharmaSynth introduces new zinc product, scales up rural extension model to 22 districts; initiate program to connect public and private sectors for tuberculosis prevention and care

May 2013: Launch Dimpa careline; form first advanced cook stoves partnership

August–October 2013: Form new partnerships between ITC and product manufacturers

December 2013–January 2014: Form two additional advanced cook stoves partnerships

April 2014: Launch TB careline

June 2014: Transition Dimpa program to the Bill & Melinda Gates Foundation and the David and Lucile Packard Foundation

October 2014: Transition management of the ORS and zinc rural health initiative to PharmaSynth

January 2015: ITC operationalizes last of 10 hubs; transition management of e-Choupal to ITC

March 2015: Transition TB careline to Karnataka Health Promotion Trust

September 2015: SHOPS program in India ends

ITC e-Choupal Rural Health Initiative

Ashish Sinha

ITC E-CHOUPAL RURAL HEALTH INITIATIVE

Addressing last-mile supply

In rural areas of India, women do not have access to feminine and child health products and consider health and hygiene-related problems as unavoidable. Only 12 percent of India's 355 million menstruating women use sanitary napkins. Indian women who cannot afford sanitary napkins traditionally use cloth strips, which contribute to urinary and reproductive tract infections. Reproductive tract infections are 70 percent more common among this group of women. Inadequate menstrual protection also causes adolescent girls (12 to 18 years of age) to miss five days of school each month, and approximately 23 percent of these girls drop out of school due to menstruation (Nielsen, 2010).

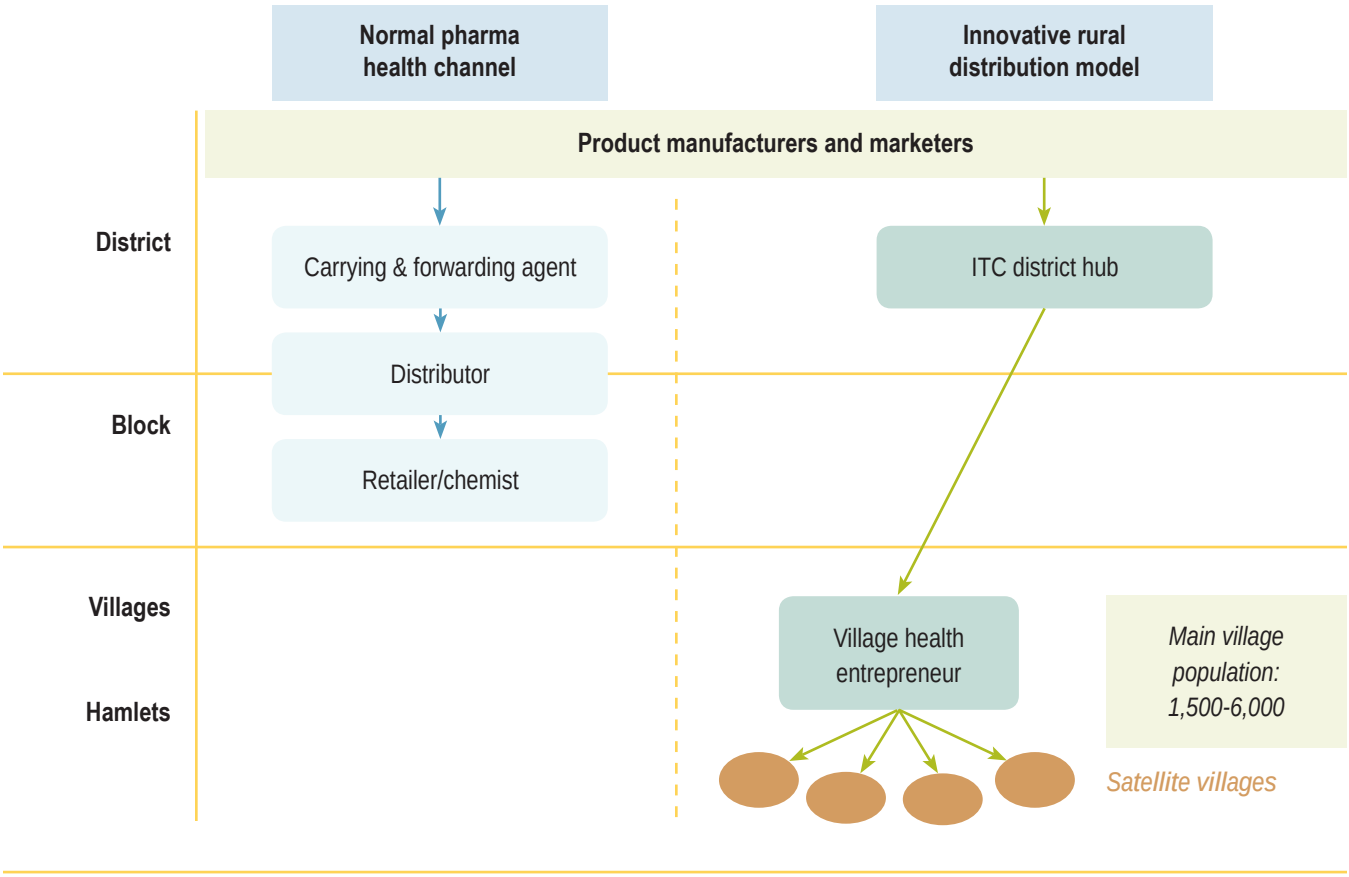
Other health products, such as oral contraceptive pills and zinc for managing childhood diarrhea, are difficult to access in rural areas. Only 12 percent of rural women who use oral contraceptive pills are able to obtain their method from public facilities. A survey conducted by SHOPS found that only 27 percent of sampled villages in Uttar Pradesh had a supplier of zinc. New product distribution mechanisms for rural areas, created through the private sector, can provide a means of bringing these life-changing products to hard-to-reach households in a sustainable manner.

SHOPS's predecessor project, MBPH, provided assistance to ITC (an agricultural procurement-distribution company) to develop a new rural health initiative built on their e-Choupal distribution platform. This platform uses a hub-and-spoke model: a local farmer, called the *Sanchalak*, services a group of villages. Each e-Choupal village supplies agricultural produce to ITC and also relays agricultural information to smaller, "last-mile" villages. Thus, the e-Choupal villages (or spokes) serve as an additional level in the distribution chain, and communicate to the next tier—the district/town-centered "hub"—which is the main procurement and storage space. In addition, there are enhanced hubs, called *sagar*, that also serve as retail outlets for products and services, ranging from soaps and apparel to tractors. The similarities of the health and agriculture markets in rural India provided an opportunity to leverage ITC's existing distribution infrastructure to access the fast-growing rural health markets, through a similar hub-and-spoke model.

> Inadequate menstrual protection causes adolescent girls to miss five days of school each month.

The ITC e-Choupal rural health initiative was designed to address the lack of access to trustworthy health information, products, and services in rural India. Village health champions (VHCs)—the frontline health entrepreneurs—source products from e-Choupal district hubs and deliver them to villages not served by traditional pharmaceutical health channels (Figure 2). This model decreases the potential for stockouts. The e-Choupal platform for agriculture exists in four states, covering 40,000 villages. The rural health initiative as originally pilot-tested by MBPH operated in just two districts of Uttar Pradesh—Gonda and Chandauli.

Figure 2. The e-Choupal rural health platform provides products directly to the village level



The mainstays of the project are the frontline health entrepreneurs, called VHCs. They serve as last-mile delivery agents for health commodities and information. The VHCs are married women, aged 28 to 45, usually the wife or eldest daughter-in-law of a retailor or teacher, as they are generally well-respected in their community. They procure health products from ITC at wholesale prices and sell them directly to consumers at retail prices. Unlike government rural health workers, who receive a monthly honorarium or salary, the VHCs work as health entrepreneurs in their villages and earn a margin-based income from the sale of health products.

Field-level supervisory staff who work for ITC are designated as channel health champions (CHCs). These individuals mentor and support VHCs. Each CHC is responsible for a team of VHCs, from identification and recruitment to training them to deliver products and services.

Ashish Sinha

Village health champions are the mainstays of the ITC e-Choupal rural health initiative.

Implementation

Under SHOPS, this rural health initiative was expanded to ten district hubs. The goal was to demonstrate a commercially viable rural health model that could increase access to health products. The objectives were to:

- Scale up the model to additional e-Choupal hubs in the states of Uttar Pradesh and Madhya Pradesh.
- Improve management and communication processes to enhance adoption of promoted health products and services.
- Enhance the viability of the model by introducing additional products.

Scaling up the model

SHOPS built on the lessons from MBPH to develop and institutionalize a comprehensive process for identifying and recruiting VHCs, actively involving the ITC e-Choupal team. The process involved soliciting nominations from the community, key opinion leaders, and other stakeholders.

Improving the Village Health Champion Selection Process

The model invested substantially in VHC training. It was critical for the trained VHCs to remain with the initiative to build a strong reputation in their communities and increase their sales over time. The program achieved this by improving the VHC selection process in two ways:

1. **Male members of the households served as motivators**. The VHC's husband played a key role in his wife becoming a champion, and motivating and supporting her in daily activities. The husband's agreement was essential for the VHC to participate effectively.
2. **VHCs were "need" entrepreneurs rather than "hobby" entrepreneurs**. Need entrepreneurs are those who need profits to contribute to household income. They may also be driven by a need for societal recognition. Hobby entrepreneurs simply want to be part of a new activity being conducted in their village.

Ashish Sinha

Village health champions were trained for 26 days over 12 months.

The majority of the VHCs recruited for the program had little or no health experience, and they required significant training to manage their own businesses. SHOPS therefore designed a comprehensive training program for VHCs, comprising 26 one-day modules, which were delivered over 12 calendar months. These trainings enabled VHCs to improve their communication and business management skills and to develop the referral process with the local health community. VHCs were trained on general health issues, including family planning, reproductive health, child health, menstrual hygiene, and general health and nutrition. VHCs also received training on educating their communities on public health issues, selling products, and developing a sustainable business.

Improving management and communication processes

SHOPS supported ITC in mainstreaming its entrepreneur-centric rural health initiative by orienting their staff on the health initiative and establishing performance metrics and review procedures. To ensure a better flow of information and to assess progress in real time, SHOPS developed a VHC information management system. SHOPS helped streamline information governance and management by training the CHCs, together with their ITC supervisors, on the use of these tools.

Research conducted by SHOPS emphasized the need for a range of promotional events and distinct communication themes to promote the product line. For example, large-scale events are a cost-efficient format for promoting gender-neutral products, like oral rehydration solution (ORS) or nutritional supplements. However, smaller meetings are more effective to demonstrate the correct way to prepare these products. Similarly, large gatherings are ineffective for promoting products like oral contraceptive pills and condoms, which have an "embarrassment factor" associated with them; the target consumers (women) are generally not comfortable discussing these items in public. While a one-to-one conversation is the ideal format, a more affordable alternative is a small group discussion of 10 to 12 women with similar social profiles.

To improve the communication processes and to enhance adoption of promoted health products and services, SHOPS supported ITC in preparing a list of events to be held in the villages and identifying appropriate events at which to promote specific products. SHOPS also assisted ITC in pre-testing and developing communication themes, scripts, and materials for VHCs to use. Finally, SHOPS supported ITC in conducting joint workshops that brought VHCs together with local community health workers, to help forge informal networks.

> Large-scale events are an effective format for promoting gender-neutral products, but not for promoting products with an "embarrassment factor."

Ashish Sinha

Involving men in the selection of family planning methods

Family planning programs often view men as gatekeepers who, if involved in reproductive decisionmaking, will only impede women's choice. The SHOPS initiative explored involving men in the decisionmaking from the start. VHCs were trained to address a couple's misconceptions regarding each method, emphasizing that family planning is a joint decision. VHCs counseled their female clients to communicate with their husbands to arrive at a contraceptive choice. The research revealed a significant increase in awareness and use of oral contraceptive pills as reported by male respondents.

Enhancing the viability of the model

SHOPS provided design input to enhance the viability of the ITC e-Choupal rural health initiative, by expanding its product offerings and its partner relationships.

Product selection

SHOPS identified additional health products for the e-Choupal product line, or basket, selected to provide positive financial returns to the VHCs and ITC, while ensuring that all products met national standards and regulatory mandates. SHOPS screened all products to meet the following three criteria: (1) no prescription was required for purchase, (2) no license was required for stocking or storing, and (3) no refrigeration was required for handling and storage. Consumer needs and preferences also influenced the final composition of the product basket (Figure 3).

Based on feedback from the communities, the product basket included sanitary napkins, pregnancy test kits, emergency contraceptive pills, and nutritional supplements. Strong community demand for these products increased the basket's commercial viability. The basket also included condoms, oral contraceptive pills, and ORS—the three essential products selected to deliver the intended public health outcomes of improved family planning and diarrhea management in underserved markets.

The balance of products is an important feature of the model, meeting the needs of a woman through the stages of her life. Sanitary napkins and pregnancy test kits are good products to initiate discussions between women and to lead to discussions of contraception, which can be an awkward topic. And the mix of products also ensures continuous cash flow for the VHCs, enabling sustainability for the longer term.

Figure 3. The e-Choupal product basket covers three types of consumers

Women	Children	Household
1. Sanitary napkins	1. Oral rehydration solution	1. Condoms
2. Iron and folic acid	2. Pediatric zinc formulations	2. Multivitamins
3. Calcium supplements		3. Pain balm
4. Oral contraceptive pills		4. Vision spring glasses
5. Fertility test kits		
6. Ovulation test kits		
7. Emergency contraceptive pills		
8. Pregnancy test kits		

Partner selection

SHOPS identified additional health product manufacturers and marketers as partners, supplying health products and related information to ITC to be distributed to the VHCs. These supply-side partners paid a fee to sell their products through the ITC e-Choupal rural health initiative. SHOPS assisted each potential partner to develop a targeted business model; each was then allowed to access one of the hubs for two to three months without paying a fee, to assess the profitability of participation in the model.

Ashish Sinha

Enticing commercial partners to join market-based partnerships

During the MBPH pilot, each manufacturing partner paid ITC a fixed "channel access" fee (per product per year) to access the e-Choupal network. However, the fixed fees were burdensome to partners with products that had low volumes and margins, such as condoms or ORS.

Learning from private sector approaches, the SHOPS initiative offered two new payment options:

- Differential pricing model: Channel access fees were determined based on four variables: latent demand for the category (volume); category or brand awareness; average category margin; and need for personalized communication.
- Activity-based approach: Instead of a channel access fee, potential partners were asked to invest in market-generation activities.

All potential product partners were given free access to the e-Choupal network for up to three months to assess the market and consider how to mitigate market risks. Partners with multiple product categories were provided further channel access fee discounts to cross-subsidize slow-moving products, reducing timelines to break even.

SHOPS assisted ITC in presenting the rural health initiative to a number of potential partners. SHOPS facilitated three partnerships with manufacturers: FDC Limited, Janani, and Population Health Services India. These partnerships took six to nine months to facilitate. SHOPS found that manufacturers were more likely to partner with ITC if they had the capacity and willingness to invest for more than one year before seeing a return on their investment.

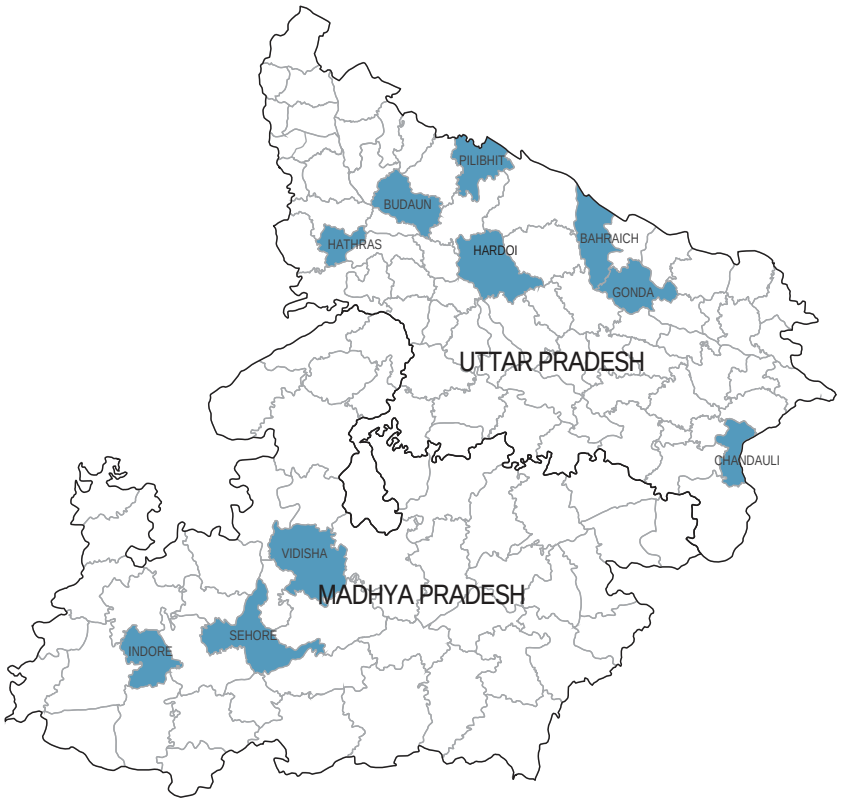
Through these three partnerships, the ITC e-Choupal rural health initiative established an initial basket of 14 products. Products were introduced slowly to each hub, allowing VHCs to add products to stock and sell as they gained experience and capital; the product brands varied according to the manufacturer that supplied the hub. SHOPS supported ITC and partners to develop promotional strategies for the VHCs and specific outreach plans for each partner. By the end of the SHOPS project, 18 branded products were sold across the e-Choupal hubs.

Results

Initiative scaled to 10 e-Choupal hubs

SHOPS assisted ITC in starting five new e-Choupal rural health hubs in the state of Uttar Pradesh and another three hubs in Madhya Pradesh—bringing the total number of hubs to 10 (Figure 4). To operationalize the additional hubs, SHOPS helped ITC recruit and train eight additional CHCs and 251 additional VHCs.

Figure 4. SHOPS expanded the ITC e-Choupal rural health initiative to 10 district hubs



Village health champions within the 10 hubs reached 71,500 people through 4,800 group meetings and an additional 89,000 women through door-to-door visits. They also reached individuals through 3,200 other activities, such as immunization days, village health and nutrition days, early childhood care and education activities, and local school events. During the SHOPS project, the e-Choupal network of VHCs sold 35,000 liters of ORS, 12,400 condoms, and 2,400 oral contraceptive pill cycles, thanks to the intensive marketing campaigns (Figures 5 and 6).

Figure 5. 35,000 liters of ORS were sold in 14 months

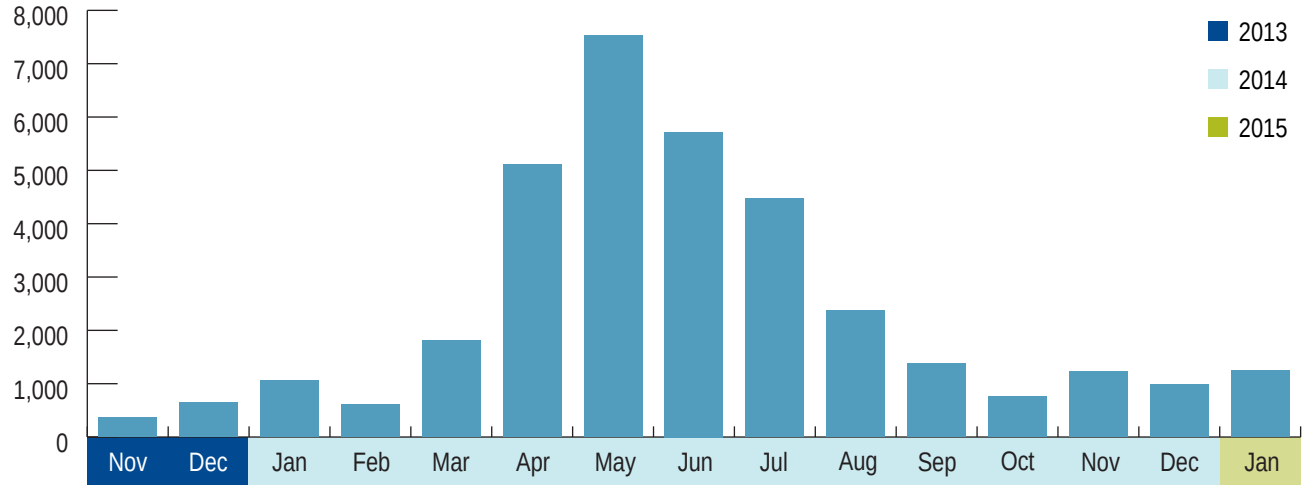
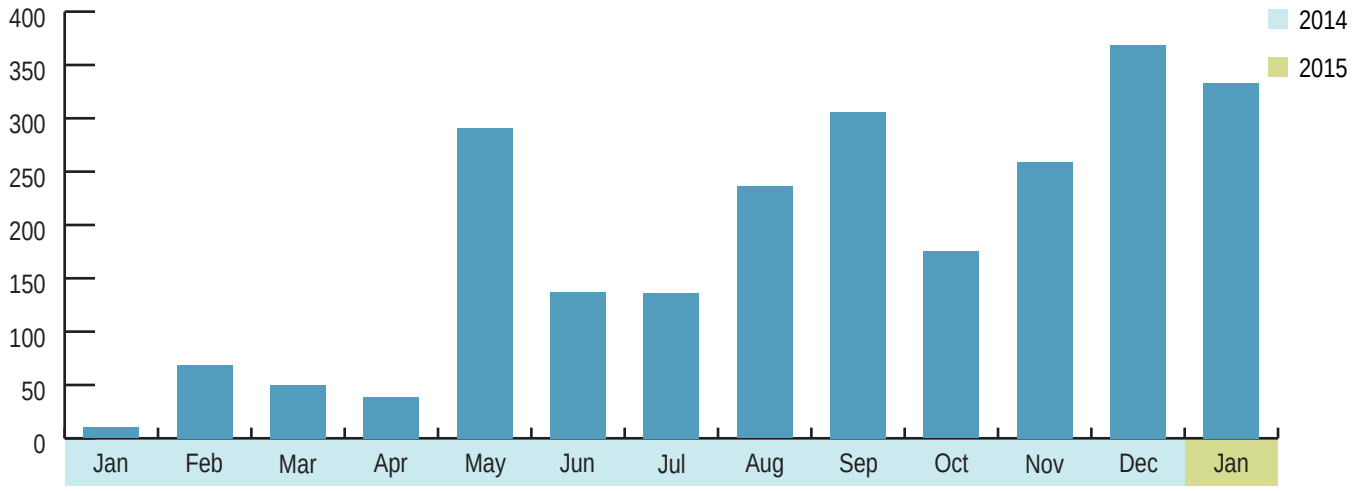


Figure 6. 2,400 cycles of oral contraceptive pills were sold in 13 months



Alongside the VHC sales results, a consumer survey found a significant increase in knowledge about ORS among primary caregivers and in the self-reported use of oral contraceptive pills and sanitary napkins.

Demonstrated profitability for ITC and VHCs

By leveraging its existing distribution infrastructure, ITC supplied a basket of health products to the VHCs and recovered direct costs. As a result, it included the model in its 2015–2017 strategic plan. ITC has gradually taken over day-to-day management of the program, recruiting three CHCs and half of the new VHCs. ITC's commitment to continue the initiative beyond the SHOPS project demonstrates that a large corporation can willingly adopt and manage a public health program with demonstrated commercial potential.

The VHC approach to distributing basic health products has also proven effective in rural India, as VHCs were able to sell products in a mixed basket at a small profit. During the SHOPS project, the peak average VHC monthly earnings occurred in June, at 523 rupees ($8.72), indicating strongest demand for seasonal items such as diarrhea management products (zinc and ORS). According to the ITC information management system, ORS sales on average accounted for 42 percent of VHC monthly income, with contraceptives accounting for 20 percent. Adding noninvasive diagnostic tests (for blood pressure, blood sugar, urine sugar, and hemoglobin) may enhance VHCs' year-round income while providing a trusted source of pre-screening for non-communicable and treatable conditions such as diabetes, hypertension, and anemia.

ITC demonstrated strong commitment to continue the e-Choupal initiative

- Created a distinct brand identity for the rural health initiative, positioning it within their product lines.
- Launched the model in five additional districts of Madhya Pradesh, recruiting new staff to support the program management team, consolidating efforts across 10 operational districts, and scaling up in the additional districts.
- Established a new partnership agreement to distribute solar lighting devices.
- Is negotiating with several companies to include basic diagnostics and referral services in the program.

VHCs work to win over customers and contribute to their families' well-being

Tethra has been a VHC since 2011. She always wanted to work to be known in her village and to break away from the monotony of daily chores.

Selling products in rural markets has been challenging. She tells her clients, "We are not distributing products for free, but offering them for sale. You will get the same quality products as in urban markets, but at the convenience of your doorstep and at a lower price."

Tethra recounts "It takes multiple visits before a household starts to buy products from us. People don't trust us in the first visits. Moreso, they are not comfortable that we talk about family planning. The only way to get around this is to repeatedly visit the household. These repeat visits change people's perception about us and our products."

She makes most of her money by selling sanitary napkins, pregnancy test kits and oral contraceptive pills and reports an average monthly income of 1,000 rupees ($16.67). Tethra pays a portion of her son's school tuition fees with the money she makes. She spends about 150 rupees ($2.50) on cosmetics, as she feels it important to be presentable when meeting her clients. She invests the remaining amount in her business.

Lessons Learned

Market-based partnerships designed to promote specific health products can become more viable when commercial and retail partners include other high-demand items in the product mix. Offering some easy-to-sell products ensures continuous cash flow and earnings for the VHCs as well as the commercial partners, enabling them to sustain and expand the model. In addition to generating income, discussion of products such as pregnancy test kits and nutritional supplements can help VHCs to initiate conversations with clients regarding more sensitive items, such as contraceptives.

Last-mile sales agents have limited reach. By analyzing sales records and collecting qualitative data, SHOPS found that, in the first year of operation, a VHC's average sales area was 20 households. The sales area is limited by the significant time required to gain the trust of individuals in new households. In response, SHOPS modified the program strategy to focus on training VHCs to increase the number of transactions per customer rather than to increase the number of customers. SHOPS recommends that the model increase the number of VHCs per village as a way of increasing overall sales and expanding access to the health products.

Diversifying market-based partnerships can mitigate risk. Having a limited number of partners (with larger product portfolios) increases the risk of program failure, since the departure of a single partner places a burden on the remaining participants. Building an initiative with five or more partners, each with a limited number of product categories, mitigates this risk and improves the sustainability of the model. Moreover, with more product partners, each partner's participation costs may be lower. This accommodates both the larger players have who appear to have limited tolerance for risk as well as the smaller players who have a limited ability to invest in the program.

Advanced Cook Stoves Initiative

ADVANCED COOK STOVES INITIATIVE
Developing commercially viable marketing channels

In 2010, 1 million people in India died from illnesses related to indoor air pollution caused by emissions from traditional stoves (WHO, 2010). Advanced cook stoves (ACS) offer a cleaner and more fuel-efficient cooking experience for millions of women in rural India, while significantly reducing carbon emissions. With close to 80 percent of the rural population still relying on traditional cooking methods, India has a large potential market for clean cooking devices. A recent study estimates the market size in India for efficient energy devices, including ACS, at $70 million per year (Bairiganjan et al., 2010). Commercial marketers of ACS in India have been unable to tap into this large potential market, and sales of ACS remain low.

> With close to 80 percent of the rural population in India still relying on traditional cooking methods, there is a large potential market for clean cooking devices.

The MBPH project initiated a partnership with ACS manufacturer Envirofit and conducted a preliminary study of the ACS industry, which found several challenges in marketing to semi-urban and rural consumers: (1) very limited means to target consumers, (2) high costs to develop the market, and (3) high costs of the last-mile supply link. The study also found that ACS products needed improvements to offer more value to semi-urban and rural consumers. It recommended a partnership approach because a single entity would not be able to profitably operate across all points of the value chain: manufacturer, distributor, and financier.

Implementation

The ACS initiative under the SHOPS project was designed to explore ways to address the marketing and financing challenges of providing health-related durable products in a commercially viable model. The objective was to test new commercial partnership models that have the potential to increase the purchase of these products.

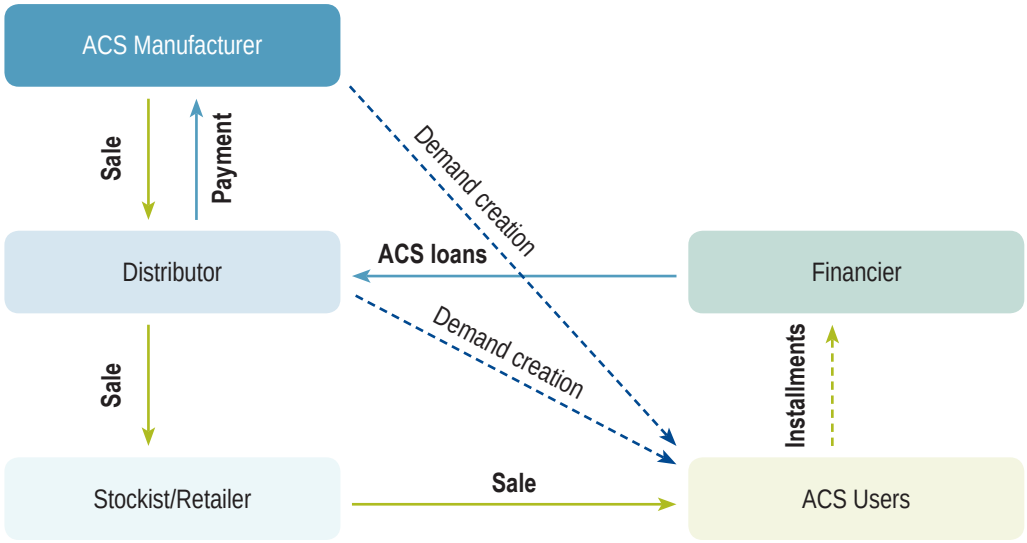
Testing new commercial partnership models

The SHOPS project facilitated three partnerships to design and pilot different partnership models aimed at increasing awareness and use of ACS in a commercially viable manner. Each of the three partnerships included three partners: Envirofit (the ACS manufacturer), a rural distributor, and a microfinance institution (MFI).[1] The partnerships allowed each partner to focus on its core competency in manufacturing, distribution, or consumer financing (Figure 7). The three partnerships were:

1. Envirofit, S-MART (rural distributor), and Sonata (MFI)
2. Envirofit, MDPCL (rural distributor), and Margdarshak (MFI)
3. Envirofit, Samip (rural distributor), and Pratinidhi (community organization/MFI)

[1] Envirofit is the only marketer of ACS in multiple states of India. With the support of SHOPS, the company invested in primary distribution infrastructure in Uttar Pradesh and hired a local marketing executive to manage its partners there.

Figure 7. The tripartite partnership model: manufacturer, distributor, and financier



SHOPS tested this tripartite partnership model in a range of conditions (varying the use of fuel and the consumer profile), as well as varying the type of financing partner (a large MFI, local MFI, or NGO). The project scaled the ACS pilot from 4 to 17 districts of Uttar Pradesh (Figure 8). This approach also allowed SHOPS to test various options for their resonance with consumers, such as product marketing approach, duration of the loan, and installment value (Table 2).

Figure 8. The 17 ACS initiative districts in Uttar Pradesh

Table 2. Three ACS partnerships: marketing approach and financing scheme

	Envirofit-S-MART-Sonata	Envirofit-MDPCL-Margdarshak	Envirofit-Samip-Pratinidhi
Marketing approach	ACS marketed along with other similar products	ACS-specific sales push	ACS-specific sales push
Financing scheme	No down payment + 20 *weekly* installments of 100 rupees ($1.67)	Down payment of 218 rupees ($3.63) + 10 *monthly* installments of 165 rupees ($2.75) + 1 final installment of 140 rupees ($2.33)	Lump payment of 1,899 rupees ($31.65) in cash *OR* Down payment of 500 rupees ($8.33) + 3 *monthly* installments of 500 rupees ($8.33)

Suma Pathy

A loan officer with Margdarshak gives a demonstration to his group members on the advanced cook stoves.

Table 3. Building partner capacity to communicate product benefits

Objections	Raising the objections before the client does (pre-empt)	Handling the objections raised (allay concerns)
Too expensive	"Some clients tell me that this stove is too expensive."	"But then, the same people who bought the stove and are now using it tell me that they would now be happy to pay even 3,000 rupees [$50] for it."
Not suitable for a large family	"This stove is only suitable for a family of five people, including children."	"If this is the only stove being used, it will be difficult to cook for larger families. Of course, if other stoves are also used, you could consider purchasing this stove."
Husband will not agree to purchase	"I see that you like the stove but you think that your husband will object to paying close to INR 3,000 rupees [$50] for something that benefits the women of the household."	"He is paying for a 50 percent reduction in fuel use, a similar reduction in smoke, and a two-year warranty on the stove."

Envirofit trained their partners' employees on technical aspects of the ACS and on brand-related communication, while SHOPS contributed training on broader, category-focused messaging to increase consumer interest. This messaging included "teaser messages" that preceded each demonstration event as well as messages to be used during demonstrations and product delivery, and responses to consumer questions. SHOPS attempted to reduce price dissonance for consumers by employing the "anchoring" approach in designing communication messages (Kahneman, 2003). For example, the messages discussed the monthly fuel savings before mentioning the purchase price. Partner staff were trained to pre-empt potential consumer objections and allay concerns, while also being honest about the extent of ACS benefits (Table 3.)

SHOPS conducted an analysis of the partnership models, from the perspective of value chain participants (distributors and financiers) and the target audience (potential consumers). The project also conducted a qualitative study to better understand the factors and pathways that lead to or inhibit purchase and regular use of ACS. Researchers observed and interviewed individuals of households using ACS and those who were targeted by the initiative but chose not to purchase the stove.

Results

Sales totaled nearly 800 ACS in the intervention areas. The purchase rates ranged from 3 percent for Sonata to 12 percent for Margdarshak[2] (Table 4). In spite of sales that were lower than expected (the original goal was 15 percent), the ACS business was found to be commercially viable for the partners, as it took advantage of their existing competencies, infrastructure, and staff, and it required little additional investment.

[2] The purchase rate is the ratio of ACS purchased to the number of people (women) contacted.

Table 4. Marketing results from ACS partnerships

	Envirofit-S-MART-Sonata	Envirofit-MDPCL-Margdarshak	Envirofit-Samip-Pratinidhi
Geography	7 districts	3 districts	7 districts
Coverage	15,787 women	1,976 women	1,050 women
Interest generated	1,551	430	173
ACS sales	471	231	85
Interest generation % (Interest generated/coverage)	10%	22%	16%
Purchase rate % (ACS sales/coverage)	3%	12%	8%

In comparing the partnerships, SHOPS found that the marketing approach and financing scheme influenced ACS purchase rates. An ACS-specific sales push led to higher purchase rates; however, qualitative research indicated those purchases had a lower use rate than purchases in a low-pressure environment, where ACS was offered alongside other products. A financing scheme that allowed consumers to spread out payments over a longer period of time, reducing each installment, was also associated with higher purchase rates. Qualitative research confirmed this finding, indicating that a household's cash flow is a major constraint to the purchase of health-related durable products.

Anil Dubey

Lessons Learned

Multi-sectoral partnerships are a viable option for the promotion and sale of health-related durable products. By enabling each partner to focus on its core competency (manufacturing, distribution, or consumer financing), multi-sectoral partnerships are able to market these products sustainably. Partnerships may need to implement institutional and systemic changes, including human resources, incentives, and marketing and financing schemes; these can be most effective in distributing ACS that are appropriately designed for semi-urban and rural areas. Additionally, these organizational changes and capacities can be used to promote other durable products with underlying health benefits, such as water filters.

Low-installment payment options, combined with targeted marketing efforts, can increase conversion rates of high-value durable products for which there is latent demand but no expressed need. Financing with lower installments brings health-related durable products within the reach of a broader market segment. A product-specific sales push can increase the purchase rates. However, a balanced approach is needed to ensure that consumers who buy the product are adequately motivated to use and benefit from it.

PharmaSynth ORS and Zinc Rural Health Initiative

PHARMASYNTH ORS AND ZINC RURAL HEALTH INITIATIVE

Increasing access and use

Each year in rural India, diarrhea kills over 180,000 children under age 5. The combination of ORS and zinc, if properly administered, could avert an estimated 75 percent of diarrheal deaths, reducing global under-5 mortality by 20 percent (Gill et al., 2013). A SHOPS survey of 1,670 caregivers in 335 target villages in 37 districts of Uttar Pradesh found low levels of effective treatment: only 18 percent of cases of diarrhea in children under 5 were treated with ORS, and none were treated with zinc (SHOPS, 2012a). The survey also found that zinc treatment was available in only 27 percent of villages; and ORS—in spite of decades of promotion in both the public and the nongovernmental sectors—was available in only 49 percent of the villages (SHOPS, 2012b).

Caregivers of children with diarrhea typically seek advice and treatment from health care providers (International Institute of Population Sciences, 2008), and a majority—over 75 percent—access the private sector (Gwatkin et al., 2000). Informal providers constitute a significant proportion of the private sector in rural India; 70 percent of caregivers visit informal providers to treat their children, especially for "common" illnesses such as diarrhea (Banerjee et al., 2012; IHMR, 2007). The SHOPS provider survey showed that the percentage of providers who reported dispensing ORS for all diarrheal cases was only 38 percent; for zinc, it was just 7 percent.

The MBPH project began coordinating joint efforts of the public and private sectors for diarrhea management. It partnered with ORS manufacturers and encouraged them to play an important role in the promotion of positive health behaviors by supporting the integration of public health messages into their marketing initiatives and interventions.

> Over 75 percent of caregivers of children with diarrhea seek treatment from the private sector.

The program developed a robust outreach and communications strategy, focusing on creating evidence for catalyzing commercial sector investments. By the end of the MBPH project, it was clear that the next logical arena for support was to assist pharmaceutical companies to expand into rural areas.

Implementation

The PharmaSynth ORS and zinc rural health initiative was designed to explore the potential of pharmaceutical companies to expand sales to rural areas sustainably and thus increase access to and use of ORS and zinc in rural areas. The specific objectives of the model were to:

- Identify key influencers in rural markets who can increase demand for ORS and zinc.
- Restructure route plans and incentives to allow sales agents to service rural routes without detracting from urban sales.
- Integrate zinc as an additional product in PharmaSynth's mainstream marketing activities.

SHOPS chose to partner with PharmaSynth, a small-scale pharmaceutical manufacturer based in India, for two main reasons: ORS was already a major contributor to its revenues, indicating a long-term interest in the area of diarrhea management, and the company was interested in leveraging its peri-urban sales infrastructure to expand into rural areas. PharmaSynth understood that rural areas comprise 80 percent of their potential market, although—with low population density, low demand density, and low ability to pay—these areas are more challenging to service efficiently.

Identifying key influencers in rural areas

PharmaSynth's lack of familiarity with rural providers was a significant barrier to their entrance into the rural market. They were uncertain about how to communicate with and influence them. The PharmaSynth salesforce had low expectations about the rural market and were accordingly extremely reluctant to modify their operations to service this segment.

SHOPS assisted PharmaSynth in identifying key influencers in rural markets who were positioned to help move products. These were second-tier informal providers who served several villages, and whose care was sought when other treatments had been unsuccessful. These second-tier providers serve a wider geographical area, are well regarded, and are well placed to influence local treatment norms. SHOPS provided technical assistance to PharmaSynth to help its salespeople communicate with these rural providers on diarrhea management, especially regarding zinc.

Restructuring route plans and incentives

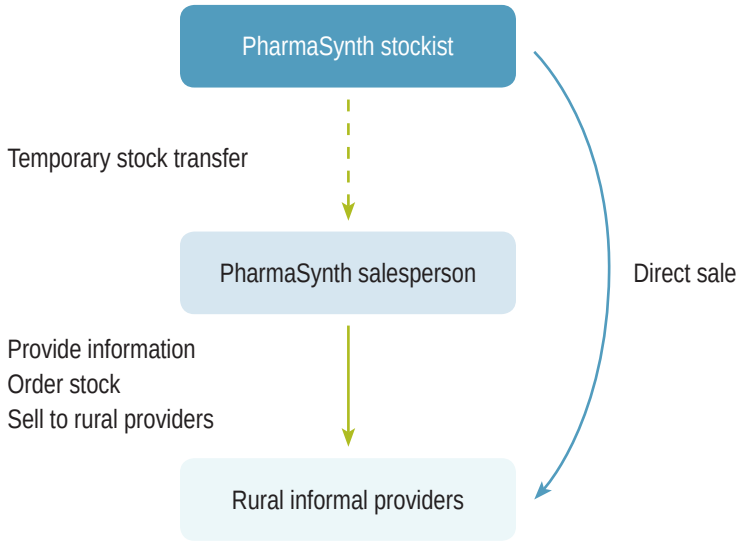
SHOPS facilitated the integration of this new, rural-oriented ORS and zinc model into the company's core business plan, mentoring and training its salesforce in developing their rural route plans and in targeting and working with rural informal providers. PharmaSynth salespeople—the levers of success for this model—had initial concerns about the potential of the rural market and about their ability to connect with nonqualified providers. SHOPS provided technical training sessions on diarrhea, conducted interactive workshops to analyze and overcome barriers, and instituted on-the-job mentoring to support the PharmaSynth sales staff in their effort to engage with rural providers.

The role of a PharmaSynth salesperson is typically limited to marketing the company's products to qualified health care providers. But rural providers, unlike peri-urban or urban providers, actually dispense rather than just prescribe medicines, so PharmaSynth salespeople in rural areas also needed to sell and deliver stocks of ORS and zinc. PharmaSynth modified its systems to give its salespeople a revolving credit facility, to allow them to purchase stock from its stockist to sell to the providers (Figure 9). Later on, as providers ordered more frequently and in greater volumes, the stockists delivered supplies directly to providers.

Oommen George

SHOPS built the capacity of PharmaSynth sales representatives through technical training sessions on diarrhea, interactive workshops, and mentoring.

Figure 9. PharmaSynth's modified system for supplying rural informal providers



Integrating zinc in marketing activities

SHOPS provided PharmaSynth with technical assistance to introduce a pediatric zinc formulation for diarrhea, as part of its overall product portfolio and as a complement to ORS, which is a significant revenue generator for PharmaSynth. Product development and introduction involved a range of investments—in production (raw materials, machinery and factories), in marketing (launch activities, point-of-sale materials, sales staff incentives), and in operations (logistics, inventory management). SHOPS worked with PharmaSynth management to develop a business plan for their new zinc brand, highlighting the opportunity to link it with their ORS brand to promote a comprehensive diarrhea management basket.

In April 2013, PharmaSynth launched its brand Zintalyte (zinc sulphate, containing 20 mg elemental zinc), targeting all 75 districts where the company had a presence. SHOPS supported PharmaSynth in the development of a launch package for the brand, providing technical information as well as communication tools aimed at rural providers, including brochures and posters. The accompanying market-priming activities focused on creating awareness about ORS and zinc among caregivers of children under 5 years. Community meetings—branded as do-kadam, or "two steps" (ORS and zinc)—attracted 15 to 20 village women. A participatory storytelling tool (Radha ki Samajhdari, or Smart Radha) was used to communicate the importance of ORS and zinc treatment for diarrhea. There were also information sessions designed for health facilities, with specially developed tools to engage patients waiting to consult the provider.

Results

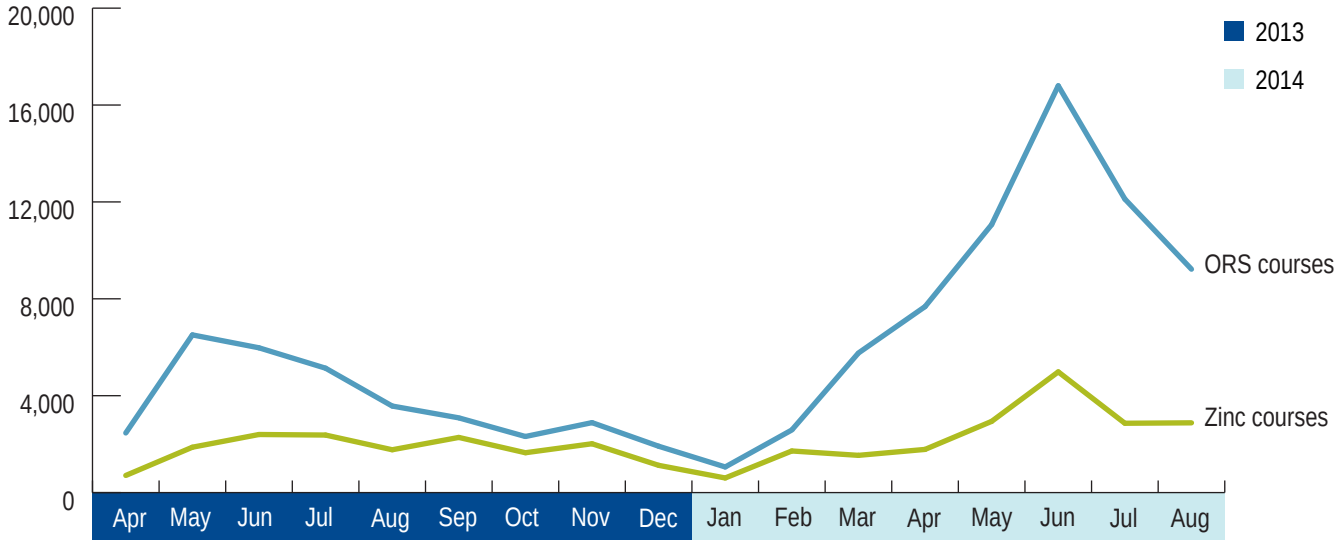
The initiative reached 22 districts in Uttar Pradesh

The intervention currently reaches 1,000 rural providers, serving an estimated three million people in 22 districts in Uttar Pradesh (Figure 10).[3] In the first 17 months, PharmaSynth sold 91,000 courses of ORS and 34,000 courses of zinc to rural providers. The contribution of rural sales of ORS and zinc to total sales of the two products more than doubled, from 7 percent to 15 percent in the 22 districts. In addition to its rural sales, PharmaSynth sold more than 110,000 courses of zinc in urban markets. Sales of ORS increased by 140 percent and sales of zinc increased by 69 percent from 2013 to 2014 during the rainy season, when diarrhea is most prevalent (Figure 11).

[3] According to an internal survey, each rural provider in the PharmaSynth network serves at least two villages.

Figure 10. SHOPS expanded the model to 22 districts in Uttar Pradesh

Figure 11. Quantities of ORS and zinc courses sold



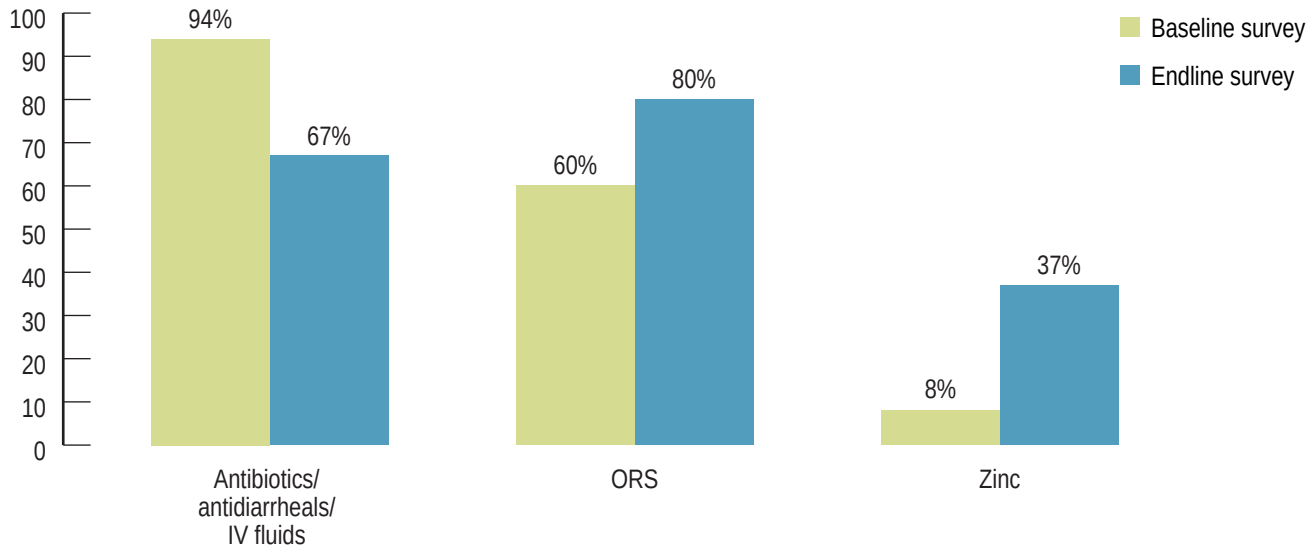
Ravi Prajapati

PharmaSynth salesperson supports the ORS and zinc rural health initiative

Arun Gupta (pictured here), PharmaSynth salesperson from Orai district, was a vocal opponent of the rural initiative, concerned that his sales performance would suffer by diverting his time from his established urban markets to untested rural markets. For the first few months of the high diarrhea season, he visited at most 15 rural providers a month. As the SHOPS field staff mentored him and showed the potential of the rural market, he began to gain confidence in that market. He now visits at least 50 rural providers monthly. He says, "The SHOPS team worked hard to convince an unbeliever like me, and now that I see the potential of rural providers. My suggestion to the company is that they not only carry this forward but expand to other districts."

The intervention demonstrated that a commercial model to engage informal rural providers could lead to improved health behaviors. The project endline survey showed an increased use of zinc and reduced use of antibiotics by caregivers treating childhood diarrhea. Similarly, the provider survey showed an increase in the number of providers recommending zinc and ORS for diarrhea, and a decrease in providers recommending antibiotics, antidiarrheal medicines, and IV fluids (Figure 12.)

Figure 12. Frequency that providers recommend treatments for childhood diarrhea



Referral mechanism increases access to ORS and zinc among poor populations

To ensure broad access to ORS and zinc, SHOPS piloted a public-private partnership to address the barrier of cost. Providers referred caregivers who were unable to afford the commercially available products to frontline health workers, who distributed ORS and zinc courses free of charge. The frontline health workers collected the referral cards, which were later matched with the providers' referral slips to indicate the actual percentage of referred caregivers receiving ORS and zinc at no cost.

In the pilot, 50 percent of providers referred at least one patient to a frontline health worker, and an average of 60 percent of referred caregivers collected ORS and zinc from a frontline health worker.

The SHOPS program successfully transitioned the initiative into existing PharmaSynth operations. Overall, access to ORS and zinc increased by 35 percent, and from private sector sources by 23 percent (SHOPS, 2015a). PharmaSynth field representatives were the major source of ORS and zinc information for 30 percent of rural providers (SHOPS, 2015b). Monthly meetings of PharmaSynth field representatives now include a section on rural markets, and rural provider visits have been institutionalized; PharmaSynth representatives have voluntarily set higher goals to reach 56 rural providers per district, instead of the 40 initially agreed upon.

SHOPS supported the design of marketing materials to promote the sale of Zintalyte.

Zinc successfully integrated into PharmaSynth's sales and marketing activities

PharmaSynth trained its representatives in all 75 districts on the use and benefits of zinc for diarrhea. PharmaSynth also produced marketing materials to promote its brand of zinc tablets and syrup among qualified and informal providers. PharmaSynth is the only commercial manufacturer in India to introduce sets of 14 dispersible tablets of zinc, which conforms to the government of India's guidelines on the duration of zinc. PharmaSynth's new brand, Zintalyte, is also priced lower than other brands in the market.

Lessons Learned

To enter rural markets, pharmaceutical companies need to introduce new brands at lower price points. To maintain the demand for higher-priced products in urban areas while introducing lower-priced generics in rural areas, a new rural brand is needed to differentiate the products. New branding enables customers to distinguish the products from one another and allows the pharmaceutical companies to market the products to distinct areas. Although this adds to the initial costs of entering rural markets, it is an essential step to maintain urban sales while expanding rural sales.

> The PharmaSynth intervention demonstrates that entry into rural markets using existing sales and distribution infrastructure is a viable and cost-effective opportunity for a company with a peri-urban presence.

Stephen Rahaim

Informal providers are willing to partner with the public health system. It may seem counterintuitive for private providers to refer patients to the public health system, as they may not want to be perceived as unable to provide care and to risk losing business. In the PPP referral mechanism, however, SHOPS learned from the informal providers that though referrals may undercut their business, it helps them respond to community pressure to provide quality care. Indeed, they are aware that they can be driven out of their area if the community perceives that they provide poor-quality care or endanger the lives of patients.

Tuberculosis Prevention and Care Initiative

TUBERCULOSIS PREVENTION AND CARE INITIATIVE

Enabling universal access to care

Globally, one in four people with tuberculosis (TB) lives in India, where an estimated 2.1 million individuals develop TB each year, and 240,000 die of the disease (WHO, 2014). Of the total estimated number, the Revised National TB Control Program (RNTCP) reported 1.4 million TB patients in 2013 (Revised National TB Control Program, 2014). The remaining third, called "missing" patients, are generally thought to be managed by the private health sector.[4]

A serious threat to effective TB control is the rapidly growing risk of drug-resistant forms of the disease. This can be mitigated through improved and early diagnosis, universal adoption of standards for diagnosis and treatment, and ensuring treatment completion and prevention.

Globally, one in four people with tuberculosis lives in India.

The national strategic plan for TB calls for the engagement of a private provider intermediary agency (PPIA) to promote the adoption of national standards for TB care by private providers (Revised National Tuberculosis Control Program, 2011). Under the MBPH project, the agency was piloted to engage private providers in TB prevention and care, focused on urban slum populations (Figure 13). The pilot achieved a 40 percent increase in the number of individuals with tuberculosis that were reported to the RNTCP (MBPH, 2011) for the targeted slum population in the state of Karnataka. This helped to inform the public-private approach for the current national strategic plan for TB.

The Karnataka Health Promotion Trust was selected to serve as the PPIA. The organization is recognized for implementing evidence-based approaches, maintaining a close relationship with the state government, and focusing on marginalized communities. The intervention focused on 663 urban slums with a population of 1.1 million, situated within 42 small and mid-sized towns with a total population of 6.3 million (Figure 14). The project worked with a network of private providers who served a much wider population of 16.8 million, across 35 RNTCP TB units in Karnataka.

Implementation

The SHOPS TB prevention and care initiative was designed to promote universal access to TB treatment by integrating public and private sector efforts in diagnosis, case notification, and treatment. The specific objectives of the initiative were to:

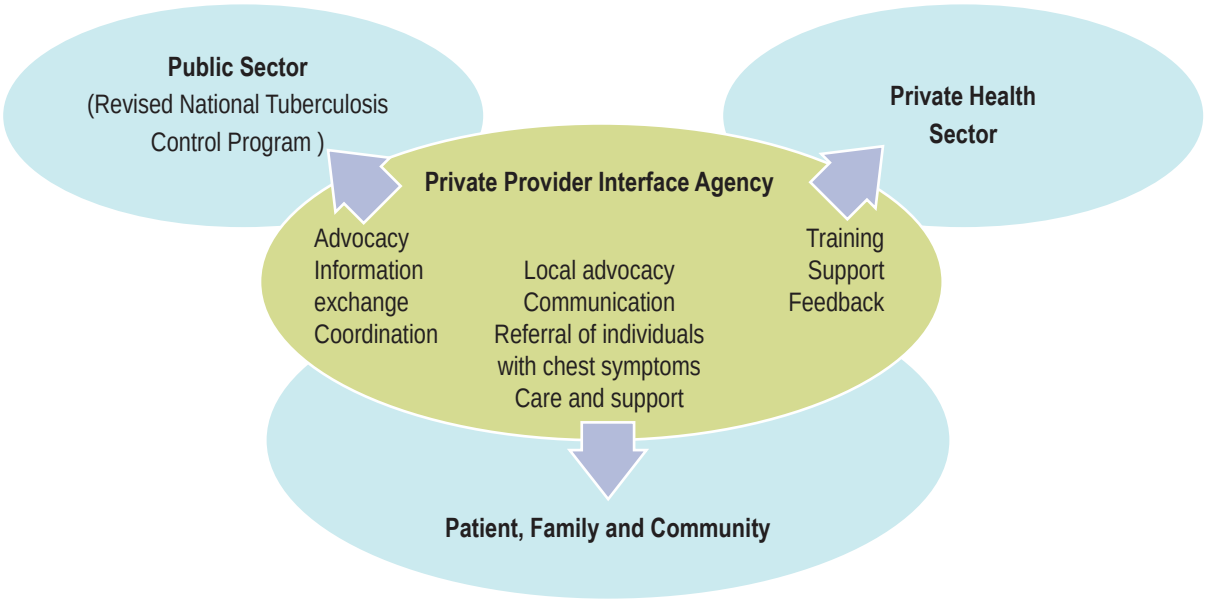
- Further refine the PPIA model for adoption in the state of Karnataka.
- Expand the engagement of vulnerable urban slum populations, promoting TB-focused health-seeking behavior.
- Engage additional private providers, enabling their adoption of key principles of TB care.
- Enable care and support of TB patients and their families, to reduce delays in diagnosis and initiation of treatment, to increase TB case notification, and to improve treatment outcomes.

Refining the private provider interface agency model

From the onset of the project, the SHOPS PPIA worked with the government-led RNTCP in Karnataka. This collaboration facilitated selection of districts and towns and the finalization of interventions. A consultative meeting, held in May 2013, engaged national and state-level stakeholders from the public and private health sectors, including the state RNTCP, National TB Institute, and medical associations.

[4] "Missing" patients represent the gap between the estimated number of people who became ill with TB in a year and the number of people who were reported to national TB programs.

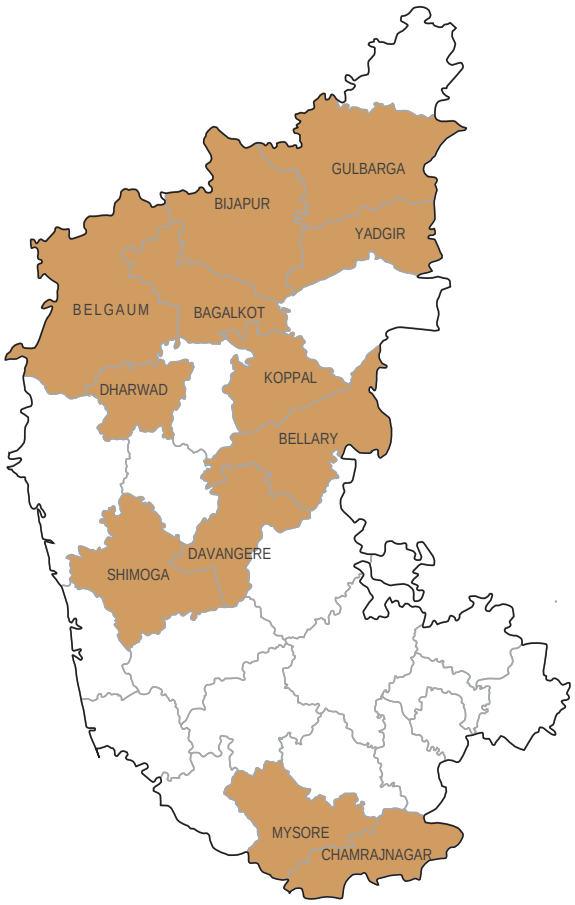
Figure 13. The private provider interface agency connected the public and private health sectors with communities



Oommen George

Public and private health sector representatives attended a launch event for the TB prevention and care initiative. (From left to right: Dr. R. Washington, Karnataka Health Promotion Trust; Dr. V. Chadha, National Tuberculosis Institute; Dr. M. D. Suryakanth, State Tuberculosis Officer, Ministry of Health and Family Welfare, Karnataka; Dr. R. V. Asokan, Indian Medical Association.)

Figure 14. SHOPS tuberculosis model, implemented in 42 towns in 12 districts of Karnataka



SHOPS partnered with five private medical colleges to train the network of private providers. This training relationship improved providers' access to tertiary services for management of TB cases associated with complex medical conditions, as well as for other cases of serious illness. Faculty from partner medical colleges trained private providers and provided technical support. At the same time, SHOPS promoted best practices for TB care within the partner medical colleges through continuing medical education programs, aimed at undergraduate and postgraduate students, college faculty, and private clinicians. The Karnataka Medical Council accredited the pre-service and continuing medical education trainings conducted by the five medical colleges.[5]

Promoting health-seeking behavior among vulnerable urban populations

SHOPS designed and executed a program that enabled access to urban slum populations. PPIA outreach workers reached out to people living in slums in the areas where SHOPS worked, mostly through interpersonal communication and engaging small homogenous groups. Community meetings and events made use of posters, movies, parades, and discussions, disseminating key messages to a widespread audience and providing opportunities for residents, including community opinion leaders, to engage with RNTCP officials to discuss issues around TB.

[5] The Karnataka Medical Council, like other national and state medical councils, is a regulatory medical body for doctors of modern medicine, mandated to ensure good medical practice by its registered members.

Communication activities focused on improving awareness about TB, focusing on common symptoms, management under modern medicine, and assurance that TB is curable. People received information on where to go for quality testing and treatment; anyone suffering from a persistent cough for two weeks or more was encouraged to ask for sputum microscopy. SHOPS facilitated the selection of services and service providers.

In addition to improving awareness, PPIA outreach workers identified people with symptoms of TB and referred them to RNTCP-certified laboratories for sputum microscopy. Access to appropriate services was ensured through local advocacy with RNTCP frontline workers at designated microscopy centers, as well as by using an exclusive referral form acceptable to RNTCP and by facilitating patients' social support—in some cases, even escorting the patients to the laboratory.

Engaging private providers

SHOPS initially mapped private and public health care providers and facilities based on their proximity to slums and local referral systems. Providers and facilitators included providers at clinics, diagnostic facilities, pharmacies, and RNTCP and PPIA frontline workers. Next, the qualified or informal private providers who met certain pre-defined criteria were trained on screening for TB, referral for testing, and care and support of TB patients. Following training, most of these providers were networked and given further support by SHOPS. Table 5 shows the numbers and types of providers at each project stage. Practitioners of modern medicine were trained in RNTCP, as well as on WHO-promoted treatment regimens, for both new and previously treated TB patients. Many also received additional input through Karnataka Medical Council-accredited CME programs on pediatric and drug-resistant TB, and TB associated with diabetes and HIV.

Oommen George

Individuals at a community gathering screen a film about tuberculosis. The film was a fictional story with clear messages about TB prevention and treatment.

Table 5. Private clinicians engaged by SHOPS at each stage, showing percentages of women

Project stage	Practitioners of modern medicine (% women)	Practitioners of Indian medicine and homeopathy (% women)	Less than fully qualified providers (% women)
Mapping	1,051 (13%)	735 (19%)	105 (8%)
Training	696 (17%)	416 (12%)	28 (4%)
Networking	647 (3%)	373 (12%)	25 (4%)

Once networked, the private providers were engaged continually through in-clinic visits by SHOPS outreach workers, field managers, and technical experts, including faculty members from partner medical colleges. SHOPS also facilitated exchange forums for clinicians to discuss problems and exchange ideas, viewpoints, solutions, and information, an activity that resulted in positive behavior change. Clinicians were given information and support that enabled them to refer patients with chest symptoms for bacteriological or molecular tests at RNTCP-certified laboratories.

SHOPS promoted five principles of TB care among providers:

1. **Appropriate health-seeking behavior of people with TB symptoms**: community members recognize early symptoms and signs of TB, know where to seek care, and demand appropriate services.
2. **Evidence-based diagnosis**: Individuals with symptoms of pulmonary TB are recommended standard bacteriological or molecular tests at RNTCP-certified laboratories.
3. **Treatment**: New patients, presumed to have drug-sensitive TB, are treated using standard regimens.
4. **Disease notification**: TB patients who have been diagnosed and initiated on treatment are reported to RNTCP.
5. **Treatment follow-through**: TB patients initiated on treatment are closely monitored and supported to ensure treatment adherence and prevent the spread of disease.

The PPIA managed sputum collection and transport of samples to reduce access barriers to RNTCP-certified laboratories, enabling evidence-based diagnosis by private providers. SHOPS tested alternative market-based approaches for sputum collection and transportation, but found them commercially unviable. Private providers received feedback on the patients referred to RNTCP, and SHOPS facilitated public or private treatment based on choices made by patients.

Providing care and support to improve diagnosis and treatment outcomes

Compliance with TB treatment is governed by multiple factors, including the patient's sense of wellness, individual tolerance of side effects of medicines, perceived stigma, sociocultural and religious norms, the opinions of influencers, economic limitations, and cognitive abilities. It is rare for the course of treatment to be completed without focused support.

SHOPS care and support activities covered pre- and post-diagnosis gaps to support patients, whether managed by private providers or under RNTCP. Pre-diagnosis services included referral of individuals with TB symptoms living in slums within the program area for appropriate testing, and enabling access to sputum microscopy through local advocacy with RNTCP for sputum collection and transport.

SHOPS developed a strategy for flexible, tailored, in-person follow-up of TB patients based on their preferences. This included guidance on treatment initiation, home visits for patient and family

Supporting private provider adoption of standards for TB care

SHOPS interviewed qualified private providers to identify ways to increase private provider compliance with TB care standards. Eight solutions were identified:

1. Continuing medical education
2. Laboratory access through sputum transportation services
3. Assured patient retention or feedback on referrals
4. Support for required documentation and patient monitoring
5. Flexibility to adopt daily drug regimens
6. Non-financial rewards
7. Non-disclosure of personal patient identifiers
8. Financial incentives

Five of these solutions had strong and wide appeal to private providers: continuing medical education, laboratory access through sputum transportation, assured patient retention or feedback on referrals, support for required documentation and patient monitoring, and flexibility to adopt daily drug regimens. The other three approaches appealed to specific sub-groups. Half of the providers interviewed reported no concerns with reporting, but expressed a lack of means to do so. Financial incentives evoked strong negative reactions from some providers.

The study indicated that many providers value inputs that create and support a provider network, especially to support patient satisfaction with provider services. Interviews indicated that a base package—offering the first six solutions—would strongly affect providers' willingness to implement both sputum tests (increasing from 27 percent to 65 percent) and reporting (from 46 percent to 72 percent).

support, and counseling. PPIA outreach workers visited patients in the program-area slums once a week during the intensive phase of treatment and thereafter once every two weeks during the continuation phase. SHOPS tracked treatment compliance and outcomes. Outreach workers promoted treatment adherence, traced and screened contacts, and addressed the concerns of caregivers and family members of TB patients. This promoted compliance, fostered tolerance to drug side effects and helped to reduce stigma among affected people.

Patients not living in program-area slums were outside the direct reach of the PPIA. To reach such patients, SHOPS established a telephone-based support system (called DOTS *Mitra* or TB careline) and promoted this through qualified, networked clinicians.[6] Providers recommended the carelineto TB patients, who then went through an auto-registration process over the phone. Once registered with the careline, patients received scheduled calls to promote and monitor treatment adherence and help prevent the spread of TB.

Venkatesh Sabnis

TB careline (DOTS Mitra*) counselors promoted treatment adherence and helped prevent the spread of the disease.*

[6] Mitra, in many Indian languages, means "friend." The careline was the name of an outbound telephone counseling service that was free of charge to patients. The service was piloted by Abt Associates initially to support continued use of the injectable contraceptive, depot medroxyprogesterone acetate. The innovation was adapted to support patients on TB treatment.

To enable community-level support, SHOPS created patient support groups for TB patients and their providers, called *prerana* (inspiration) groups. This improved acceptance of the disease and its treatment and addressed stigma around TB. Prerana meetings were held once a month at government facilities or at other locations such as public parks and community halls. Participating patients were at various stages of treatment and even included some who had completed therapy. A wide spectrum of issues around TB was discussed, and most solutions were provided by the participants who included patients, their partners, other family members, and even friends. RNTCP frontline workers and private providers were often invited to attend these meetings.

Oommen George

A prerana *group meeting at the district tuberculosis office in Yadgir town.*

Results

PPIA increased TB detection and reporting

SHOPS demonstrated that a PPIA, working synergistically with public and private health sectors and with communities, can improve TB prevention, care, and control. This mechanism demonstrated a means to increase TB detection under RNTCP and identify TB patients who weren't receiving treatment through private provider engagement. SHOPS initiated 18,000 referrals to private providers and diagnosed nearly 8,000 diagnosed TB patients from a population of 16.8 million people living in an area covered by 35 RNTCP TB Units. Eighteen percent of these registrants were children. Of these totals, 10,700 referrals and 2,100 TB patients came from a subpopulation of 1.1 million living in urban slums.

In alignment with national and global ratios, about a third of the TB patients registered by SHOPS were female. However, the percentage of children was triple the expected ratio: while the estimated child incidence of TB is around 6 percent of TB patients globally—similar to the reporting rate of children under the RNTCP—SHOPS registered 1,400 children with TB, or 18 percent of total patient registration; 11 percent of the total were less than 5 years of age.[7]

Of the 7,800 diagnosed TB patients registered with SHOPS, 81 percent were referred by private clinicians, while the remaining 1,500 were referred by PPIA outreach workers. A large number of patients (2,100) were identified from intervention slums. The number of TB patients referred by PPIA outreach workers plateaued after five months of intervention, but the number of TB patients referred by networked private providers continued to rise (Figure 15). Overall, 32 percent of patients from slums were privately diagnosed. Figure 16 shows that the rate of TB reporting in slums increased during the SHOPS program.

Delay in TB diagnosis and initiation of treatment

SHOPS studied the delay for patients seeking care from RNTCP as a result of the PPIA intervention. The study found that the mean total delay decreased by 72 percent from December 2011 to December 2014—from 57 days to 16 days. The study also found that TB patients visited fewer doctors prior to initiating treatment as a result of the intervention.

[7] In the context of TB, "children" are defined as people less than 15 years of age.

Figure 15. Outreach worker referrals plateaued while private provider referrals increased

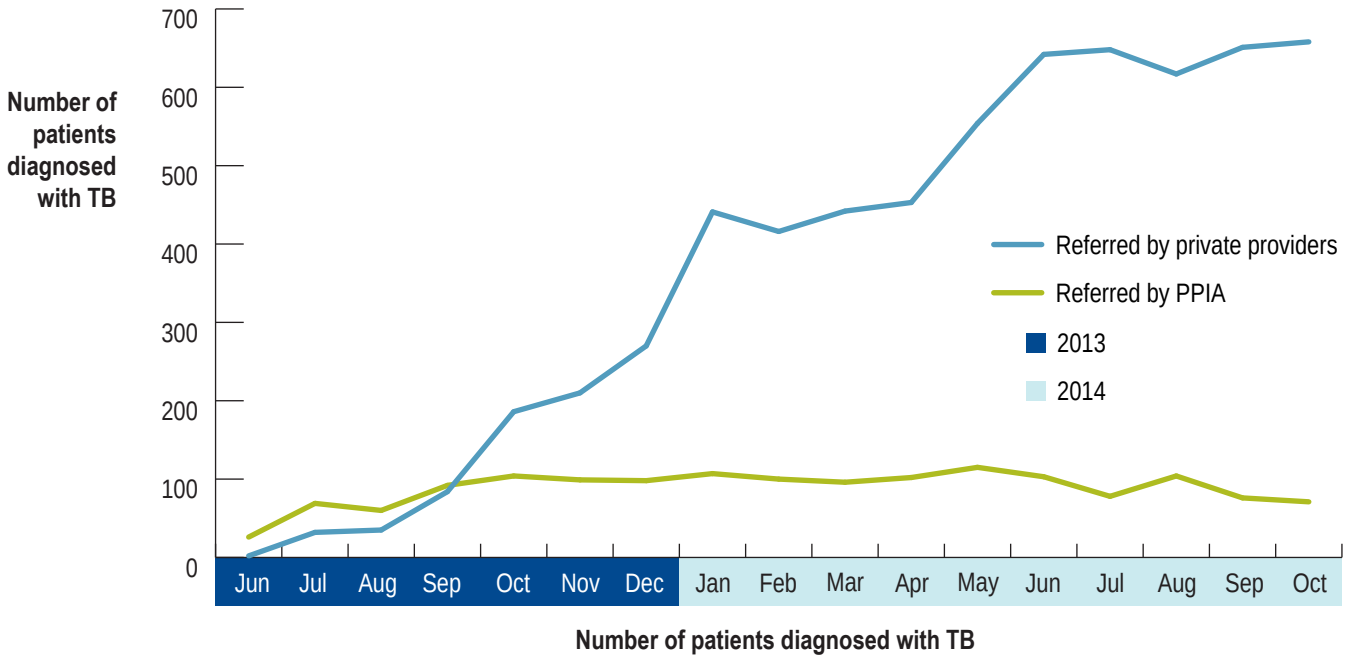
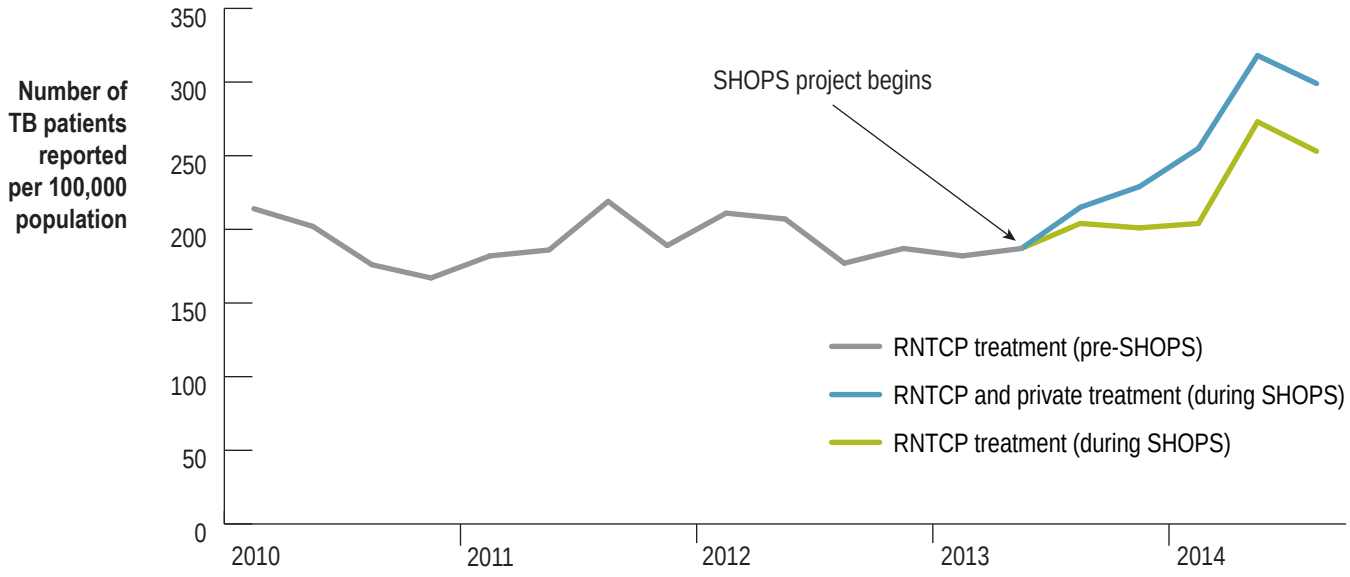


Figure 16. Rate of TB patient reporting in slum population increased



Patient support yields improved treatment outcomes

SHOPS enabled an increased level of care and support to patients with TB and their families, facilitating private provider participation in the PPIA program and improving treatment outcomes. SHOPS followed up with 873 patients from intervention slums. Of this number, 43 patients transferred out of the project area and 1 person was switched to multidrug-resistant TB treatment. The remaining 829 patients included 701 on RNTCP and 128 on private treatments; of this group, 82 percent were cured or successfully treated. Success rates were roughly equal for RNTCP and patients treated by private providers. SHOPS also supported treatment compliance and documented the results, as reported by patients receiving in-person care and support.

> The SHOPS program led to a 96 percent treatment compliance rate.

A total of 1,780 TB patients were monitored in all target areas, including 1,409 in RNTCP and 371 in private care. Overall, treatment compliance remained high throughout the program period, averaging 96 percent for all patients (95 percent for patients in RNTCP and 97 percent in private care).

Oommen George

Outreach workers conducted contact tracing in the households of 1,000 newly identified TB patients living in the intervention slums. Additional people with symptoms of TB were found in about 70 of the households, and 200 were referred for testing. Of those referred, 47 percent were children less than 5 years of age.

The TB careline, launched in April 2014, showed considerable potential to address some aspects of care and support for TB patients who were unable or unwilling to pursue in-person treatment follow up. A total of 1,000 TB patients, referred by 170 networked private providers, were registered for the careline service. Children constituted 30 percent of the registered patients—75 percent of them less than 5 years of age—and the elderly constituted about 20 percent.

The MBPH project established the importance of a comprehensive PPIA mechanism to improve TB diagnosis under RNTCP. The SHOPS TB prevention and care initiative provided evidence to advocate for scaled up private sector engagement, to identify "missing" TB patients, and improve treatment quality. SHOPS showed that private sector participation results in better reach among more vulnerable populations, especially children, than is possible through RNTCP. Such a multi-sectoral approach can address all sub-populations. Patients in private treatment see value in follow-up care and support (whether in-person or telephone-based), in turn encouraging adoption of TB care standards by private clinicians.

The RNTCP in Karnataka has voiced support for continuing the PPIA as established by SHOPS. Its support both before and during the intervention enabled SHOPS to achieve commendable results, while showing the RNTCP a new approach to identify "missing" TB patients, improve the quality of care and treatment outcomes, and achieve universal coverage of quality TB services.

A private provider diagnoses a young TB patient

Suresh, 35, a scrap dealer who earns 15,000 rupees monthly ($240), lives with his wife, Lalitha (25), a 6-year-old son, and a 15-month-old daughter in a town in southern Karnataka. Their daughter, Meena, runs around the house happily, her eyes twinkling as she displays four little teeth when she smiles. Meena appears thinner than most toddlers her age, but her parents are grateful for her health. Diagnosed with TB as a baby, Meena weighed just 4 kilos (8 pounds) at 3 months of age.

Suresh says, "My sister, who died a few months ago, was suffering from TB for over 20 years. She was bedridden and longed to spend a little time with Meena. We knew the dangers, but didn't have the heart to refuse her. So we let our baby be with her, a decision I now regret." Lalitha says, "Our baby was treated for cough and cold in the beginning, but I was worried as she had been exposed to TB. I shared my fears with Dr. Ramesh, a private child specialist [with the SHOPS-supported network of TB providers]. He immediately had her tested and my fears were confirmed. Dr. Ramesh impressed on us that we would have to ensure she did not miss a single dose of medication."

Tears well up as Lalitha recalls the difficulties of keeping a little baby on prolonged medication. "She used to cry and resist the medicine so much. My son wept with her and pleaded with me that he would take the medicine instead, and that his sister should be spared." Suresh adds, "During this heart-wrenching time, Dr. Ramesh was extremely supportive and gave us the moral support we needed. But the ultimate responsibility rested with us. We were determined that our little daughter should not suffer the consequences of our behavior, so we ensured that the medicines were given to her. The days she spat out the medicine were the worst because we had to begin all over again. The tablets had to be crushed and must have been very bitter, even though we mixed it with sweet syrup."

"But, she has gained weight and is now 8 kilos [18 pounds]," adds Suresh, with a smile.

Meena is fortunate to have parents committed to completing her treatment, and for having a doctor who took the right steps. The family's efforts paid off and they are grateful that Meena can have a future.

Note: The names have been changed to protect the family's privacy.

Lessons Learned

Multiple channels of access to health services are required to reach diverse populations. SHOPS found that the private sector can be effective in reaching vulnerable groups—including children—with TB prevention and care services. The PPIA registered three times the percentage of children as the RNTCP, indicating that caregivers of children rely on private sector care. PPIAs established an alternative for registering TB patients with the RNTCP, by leveraging the private sector.

Qualified providers respond to improved client satisfaction. Activities that had a demonstrable effect on client satisfaction—such as carelines, outreach workers, and support groups—gained the support of private providers. In-clinic support services for providers encouraged them to follow TB treatment standards, including notifying patients to RNTCP. The synergies between these activities and improvements in private provider care have been shown to lead to better TB treatment outcomes.

Dimpa Program

Devika Varghese

DIMPA PROGRAM
Improving contraception continuation rates

Although contraceptive use has been increasing in India in the past few decades, there remains a substantial unmet need for contraception. Twenty-one percent of all recent pregnancies in India that resulted in a live birth were unplanned, including 11 percent that were not wanted at all and 10 percent that were wanted later (International Institute for Population Sciences, 2006). There is considerable variation within India: current use of any family planning method is below 40 percent in the states of Uttar Pradesh, Bihar, Jharkhand, and Meghalaya (International Institute for Population Sciences, 2008).

Critical factors limiting the uptake of modern contraceptive methods include a lack of consistent and quality services in the public sector; inadequate participation of the private sector; lack of timely and consistent counseling; negative socio-cultural norms; and structural barriers that limit contraceptive choice. Another key reason for the slow increase in use of modern family planning methods, especially for spacing births, is the high rate of discontinuation. In Uttar Pradesh, for example, the first-year discontinuation rate for oral contraceptive pills is 61 percent, and discontinuation of injectable contraceptives before the second dose (at three months) is 70 percent.

The Dimpa program began in 2003 as a pilot launched in three cities of Uttar Pradesh by the USAID-funded Commercial Market Strategies project. The program was designed to increase access to and demand for DMPA, a three-monthly injectable contraceptive, through engaging the private sector. Based on the success of the pilot, the program was expanded and intensified under the Private Sector Partnerships-*One* (2004–2009) and MBPH (2008–2012) projects.

The core of the program was a network of private sector clinics, the Dimpa network, that offered a full range of contraceptive options to their clients. By the end of the MBPH project in 2012, more than 75 percent of the providers in the network complied with quality of care standards by offering DMPA to family planning clients as a contraceptive choice (Market-

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Private providers in the Dimpa network played a vital role in educating women on the importance of reliable family planning methods.

based Partnerships for Health, 2012a). However, the program strategy was not effective in ensuring user satisfaction, and the low continuation rate among users of DMPA remained a challenge.

Preliminary research conducted by the MBPH project found that counseling potential adopters on side effects at the time of administration, though important, is insufficient. Women who experience side effects need additional reassurance and guidance. However, they may not return to their provider to discuss their experience or seek alternatives because of physical and financial access barriers. Standard approaches to increasing use include in-person visits by health workers and multimedia messages, but since these were not cost effective, an innovative approach was needed to increase continuation rates.

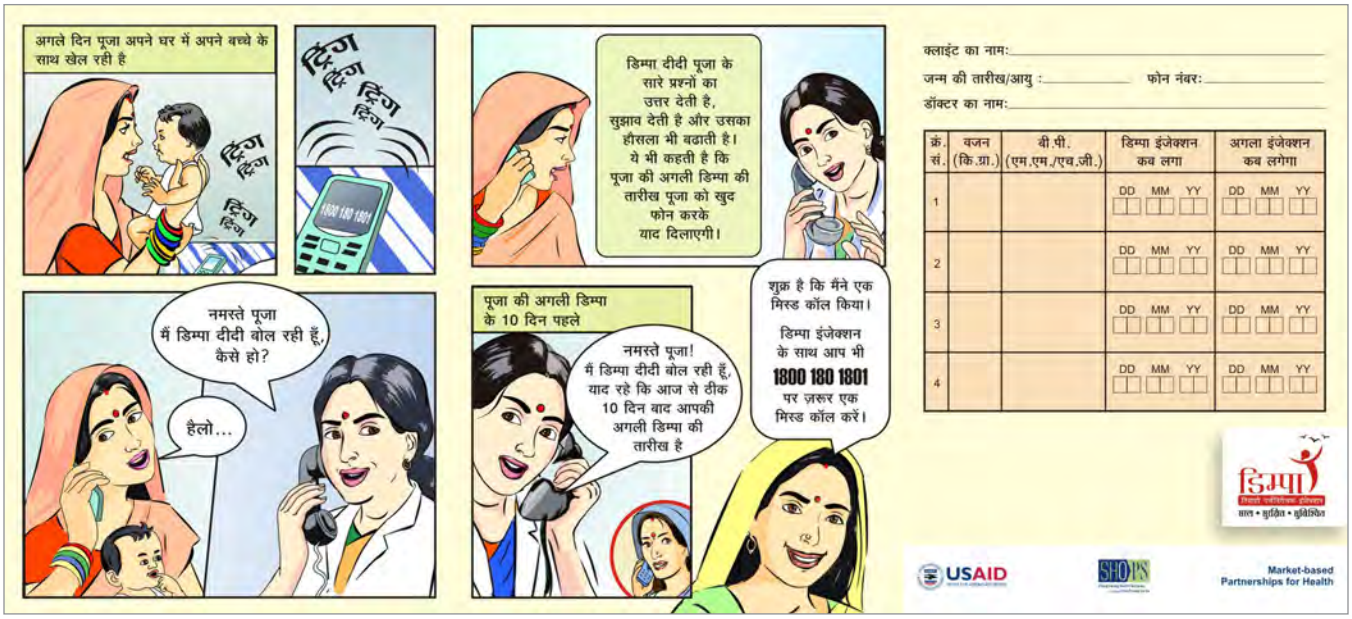
The Dimpa careline was a telephone-based comprehensive counseling service, begun as a pilot under the MBPH project. The careline provided DMPA users with information on possible side effects, how to manage them, and when to return to a provider; and gave reminders on subsequent injection dates. The careline service comprised seven calls to the user spread over a 12-month period, covering four injection cycles. Evidence from MBPH suggested that this form of comprehensive counseling and support increased DMPA use and reduced discontinuation. A small-scale pilot test showed that outbound calls from the careline increased DMPA second-dose continuation rates from 32 percent to 96 percent (MBPH, 2012b).

Implementation

The Dimpa program under the SHOPS project addressed the challenge of low DMPA continuation rates. The specific objective of the model was to improve continuation rates through scaling and enhancing of the Dimpa careline.

SHOPS expanded the Dimpa careline to 33 districts in Uttar Pradesh (Figure 18), with an estimated 25,000 DMPA users. The project introduced an advanced web-based technology to enhance operational efficiency. This allowed for a shift from field-triggered careline registration to client self-registration, using a “missed-call” mechanism.

SHOPS promoted the self-enrollment feature at clinics in all districts. It developed outreach materials, including a comic booklet that introduced and explained the service.



To promote the Dimpa careline, SHOPS developed outreach materials, such as this comic booklet.

While advanced technology and outreach materials enabled this quick scale-up, the critical component of the careline's success were the counselors. They listened to the users' concerns, reassured them, and when appropriate, referred them to a provider. Counselors were able to address user concerns in interactions that ensured unbiased and clear information and that protected the user's dignity, confidentiality, and privacy. SHOPS designed a continuous learning plan to build capacity of careline counselors, including classroom technical sessions, on-the-job modules, and skill-building sessions through simulations. The program also developed a counselor toolkit that included call scripts, reference materials on technical concepts, frequently asked questions, and algorithms.

Paramedic staff at service delivery points served as important communicators with clients, both at entry and exit. SHOPS provided paramedic staff with skills on effective family planning counseling, as well as strategies to encourage DMPA users to register with the careline service.

Results

By the end of the SHOPS project, the program had 12,300 voluntary registrants enrolled in the Dimpa careline, accounting for 40 percent coverage of the estimated DMPA users in the project area. The first-year continuation rate among Dimpa careline clients was 38 percent, considerably higher than the 23 percent reported nationally in the National Family Health Survey-3 (International Institute for Population Sciences, 2006). An analysis of careline data indicated that DMPA continuation rates were the highest among registered users who received all calls, suggesting that it was imperative to ensure early registration of users.

The number of network providers referring users to the careline was low—only 26 percent of network providers referred at least one user to the careline. While some providers valued the careline and understood that it complemented their work, it did not have provider buy-in across the network. However, users acknowledged that careline counseling was beneficial in giving them reassurance and making them feel cared for. Many providers appreciated that "counseling by phone" had a tangible and practical benefit to users, reducing their costs for nonessential follow-up visits to providers.

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Paramedic staff, a trusted source of health information, recommended that DMPA users register with the Dimpa careline.

Figure 18. The Dimpa network covered 33 districts in Uttar Pradesh

DMPA is on the threshold of becoming a widely accepted family planning method in India. SHOPS research indicates that the number of women using DMPA increased from 0.15 percent in 2009 to 1.08 percent in 2014, within the project intervention area. This finding validates the Dimpa network as an effective model to engage with private health care providers and paramedic staff currently offering family planning services. However, general awareness of DMPA remains low (SHOPS, 2014), pointing to the need for continued demand generation efforts.

In June 2014, the Dimpa program was transitioned to the Dimpa Project, supported by the David and Lucile Packard Foundation and the Bill and Melinda Gates Foundation. The new project is actively incorporating recommendations from the SHOPS project and plans to expand the Dimpa network and careline to 105 towns in the states of Uttar Pradesh and Bihar.

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A Dimpa careline user's experience

After giving birth to her daughter, Rita Garg and her husband wanted to wait for two years before having another child. After consulting her doctor about contraceptive options, Garg chose depot medroxyprogesterone acetate (DMPA). She received her first injection six weeks after delivering her daughter, but began experiencing side effects before her next injection. She lives in the outskirts of a small town in Uttar Pradesh, 10 kilometers away from her doctor's clinic. Traveling there requires multiple means of transport and then putting up with long wait times. After experiencing irregular menstrual bleeding, Garg consulted her neighbors, who shared stories of contraceptive side effects and weight gain. She was worried and questioned whether to continue with DMPA.

Just as the time for her next injection arrived, Garg met a community outreach worker, who introduced her to the Dimpa careline. After registering, the careline counselor reassured Garg about her side effects. The counselor explained that she could call again with any questions, and Garg began to feel better. A week later, the careline counselor followed up with Garg about how she was feeling, and reminded her that she was due for her next injection. A year later, Garg has completed four cycles of DMPA injections, and is happy to have continued with the choice she made.

Lessons Learned

For telephone counseling platforms, the technology is the medium and the counselors are the key. The technological advancements made to the careline by SHOPS created an effective platform to reach a targeted population, but the quality of the counseling determined its success. While initial investments in the technology are important, ongoing investments in the counselors are essential to expand the user base and increase DMPA continuation rates.

Private providers are motivated by the satisfaction of their clients. Interventions that boost their clients' satisfaction with a certain method will increase providers' likelihood of recommending the same method to other clients. SHOPS found that Dimpa network providers considered the careline to be effective in improving client satisfaction with DMPA. This influences providers to recommend the careline to clients and to recommend the method to more clients. This lesson would apply in all facets of patient-provider interaction.

SHOPS also found that providers want both high-level, aggregate feedback and more detailed feedback specific to their own practice and clients. Providers suggested that having information about their clients' continuation rates and concerns would enable them to better serve clients. The Dimpa Project, with the support of the Gates and Packard foundations, responded to this request and is channeling detailed feedback from the careline to the network providers.

Cost remains a significant barrier to adoption of DMPA. The price of DMPA has declined steadily over the past ten years, and SHOPS found that the cost of the commodity itself does not present a financial barrier to most clients. However, obstetricians, gynecologists and general practitioners typically charge a consultation fee ranging from 100 to 300 rupees ($1.67–5.00). Field reports and other evidence indicate that the total cost may exceed lower-income clients' willingness to pay. Innovations around private sector health financing could broaden access to DMPA by addressing this cost barrier.

Lessons Learned

water.org

LESSONS LEARNED

The five models implemented by SHOPS vary in their specific objectives, but all aimed to enhance the contributions of the private sector to meet public health goals in India, with a focus on scale, quality, and mix of products. All models employed market-based partnerships to improve health outcomes. In the process of implementing and evaluating these models, SHOPS gained vital insights for continuing efforts to foster these partnerships globally.

Market-based partnerships can be accelerated by supporting financial and market analysis. The SHOPS initiatives had already been launched in some form before the SHOPS project, supported by a long history of USAID-funded projects cultivating public-private partnerships in India. All yielded a wealth of detailed information on program successes and lessons learned. In each case, some lead time was required to properly align public health priorities with the private sector's need to see a return on investments. Providing financial and market analysis for private sector partners catalyzed partnerships.

In the ITC initiative, new payment options as well as trial periods for potential partners helped to ease the way, allowing partners to mitigate market risks and to pre-test the performance of their products. Similarly, PharmaSynth management was uncertain of the return on investment for zinc, a category not yet established in the market even among qualified urban health care providers. SHOPS research showed its commercial potential, and PharmaSynth invested in adding zinc to its product portfolio and in building a network of rural private health care providers for preventing and managing diarrhea.

The private sector can serve more market segments with new brands and improved referral mechanisms. Equitable access to products is a concern for private sector projects. SHOPS found that working with the private sector to create new brands targeted to rural areas and the urban poor could expand access to private sector products. Branding at different price points maintains urban sales while expanding into rural areas, as shown in the ITC and PharmaSynth initiatives. The PharmaSynth initiative went a step

McKay Savage

Devika Varghese

further: caregivers of children with diarrhea, who could not afford privately purchased zinc and ORS, were referred by informal providers to government frontline health workers. Similarly, in the TB prevention and care initiative the RNTCP expanded access to free anti-TB treatment by working with private providers to accept their diagnoses and recognize treatment of TB in the private sector. By harnessing the power of the private sector to reach underserved communities, these efforts provided more equitable access to health products and services.

Private providers are motivated to change their own behavior if they believe the change will result in increased client satisfaction. Projects that seek to change the behavior of private providers need to demonstrate to providers how the change will increase client satisfaction. Private providers are beholden to their clients, who have a choice of providers, and they readily tailor their services to maximize client satisfaction and client flow. By demonstrating the impact of carelines and support groups, SHOPS gained the support of private providers in promoting these activities. Synergies between these activities and further improvements in treatment and prescribing behavior, as introduced by SHOPS, led to improved health outcomes.

Dedicated and well-trained counselors are needed for successful telephone-based support services. Operational efficiency of the Dimpa and TB carelines was based on improved technology (user registration, data capture, and management), but the investment in the selection and professional development of counselors was responsible for the increased continuation and adherence rates among careline users. Projects that aim to introduce new technologies, such as telephone-based support services, need to recognize the importance of the human resources and human interactions.

These insights are not limited to the experience of the SHOPS project in India; they are applicable in many other countries with an emerging or strong private sector with formal and informal private health care providers. They have global implications for donor-supported projects that engage the private sector to improve health outcomes. Similar principles may be applicable in other development fields, such as agriculture and education, where collective and coordinated efforts of the public and private sectors can drive progress toward shared development goals.

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

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