

INCLUSIVE INNOVATIONS

Reaching the Poor through Community Health Workers

Local women provide basic healthcare services, including information and referrals, through home visits and kiosks

HIGHLIGHTS

- Community health workers bring affordable health-related goods and services to the homes of people in underserved communities that have poor access to basic health services.
- Programs have reduced morbidity and mortality and increased the communities' use of health services.
- Most programs rely on donor funding.



Summary

Community health workers (CHWs)—largely local women, provided with only basic training—are providing health information, reminders, and basic healthcare services; selling health-related products, including medicines; and collecting valuable healthcare data. By going door to door to reach people, they are improving health outcomes among the rural poor, who are often unable to reach healthcare facilities.

Development Challenge

Accessing basic health services is difficult in rural and poor communities, in part because of the shortage of skilled professionals. Even where services are provided free of charge, poor people often fail to access them, because they lack the means to reach the facilities. The result is poor health and nutrition outcomes and high morbidity and mortality from preventable causes.

Business Model

CHW programs address a number of key challenges that health systems in developing countries face, including an acute shortage of professional health workers, health workers' unwillingness to spend extended time in remote and rural areas, and the inability of most formal health sector institutions to reach the poorest people within those communities. Robust evidence indicates that CHWs lead to improved health outcomes, particularly in maternal and child health (WHO 2007).

There is no universally accepted definition of CHWs; their roles, profiles, and titles vary across and within countries, where they are known by some 40 different terms. The plethora of terms reflects the diverse roles these people play, from promoting healthy practices to providing specialist services and selling health and sanitary products.

Because they live in the communities they serve, CHWs are culturally aware and able to deliver key health messages in ways that recognize the local cultural context. They help other community members navigate the formal health system, providing a crucial link between people and facilities.

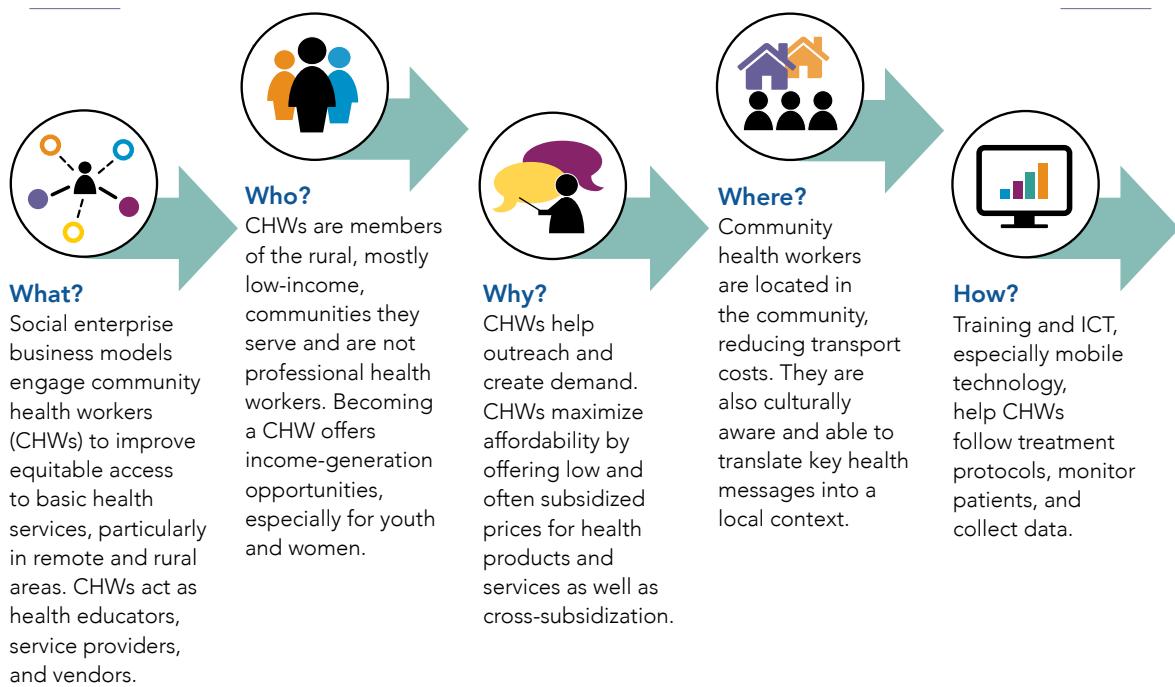
Components of the Model

CHWs are people from the community with some education who receive brief training (see Figure 1). Although they can include men, most are women. Arogya, an Indian enterprise, recruits only young women with secondary education. The Real Medicine Foundation, which also works in India, places emphasis on local, rather than formal, knowledge.

CHWs educate people in underserved communities, link them to formal health services, and generate demand for health services. They sometimes also collect health information; sell health products and other goods; offer simple preventive, diagnostic, and treatment services; facilitate adherence to treatment; support family planning; refer patients to health centers; and handle recordkeeping.

CHWs receive salaries, stipends, or results-based payments or fees. They are also motivated by nonfinancial incentives, including mobile phones, free or preferential access to commodities, social interaction with peers, help transitioning into national health service or work with an NGO, and priority for paid jobs in health campaigns such as immunization days.

Figure 1. Features of model that empowers community health workers for access to healthcare services



Social enterprises such as Living Goods and M-Afyah in Africa link offer income-generation opportunities through the sale of commodities. In addition to providing health education, its workers sell health-related products (such as mosquito nets and water purification tablets); personal care products (such as soap and sanitary pads); and products that support household income or savings (such as solar lanterns and high-yield seeds).

Staff at local health facilities often supervise, mentor, and motivate CHWs, who refer patients to them. M-Afyah gives local clinicians ownership stakes in kiosks the enterprise operates. Arogya partners with the Fortis Hospital chain, which co-develops the training of CHWs, provides pro bono consultations,

and reviews the services provided by its physicians. It also partners with local health facilities of the public sector, which accept referrals from and provide medical advice to its CHWs.

Mobile technology plays an important role in empowering CHWs. It facilitates patient monitoring, allows for the application of computerized treatment protocols, supports the collection and analysis of patient data, enables the sharing of patient data with health facilities, promotes results transparency and performance management, and reduces costs.

CommCare, which operates in India and other countries, provides its workers with software that includes registration forms, checklists, danger sign monitoring tools, and educational prompts. The Real Medicine Foundation uses CHWs to combat malnutrition. It equips every worker with a mobile phone to help triage children, record their information, assist in their counseling sessions with images and voice prompts, and send reminders for follow-up. Use of the mobile phone improved both the quality of the data and interactions with beneficiaries.

Cost Factors

Key cost factors are development of the information and communications technology (ICT) software, hardware costs and training of CHWs. Salaries for CHWs are generally based on their revenue generation activities rather than a fixed amount.

Revenue Streams

Revenue streams include payment for referrals, the sale of products and services, and grants. Living Goods' "micro-entrepreneurs" sell health-related goods, such as antibacterial soap and medicines, to people that lack access to markets. Arogya's CHWs charge a small fee at kiosks for distance consultations with doctors, who consult patients via a mobile connection and laptop computer. CHWs sometimes charge a small fee to the users.

Financial Viability

Both for-profit and nonprofit enterprises use CHWs. Merrygold is a profitable for-profit enterprise. Living Goods' micro-franchisees are financially viable and the organization is highly cost-effective (at a net cost of less than USD 2 per client per year), but it still relies on grant funding of approximately USD 10 million to cover its annual budget. Arogya aims to achieve financial sustainability by generating revenue from selling the aggregated data it collects and analyzes. Other initiatives, such as the Bandhan Health Program and SAJIDA Bandhu, use revenue from microfinance loans to cross-subsidize health programs. Living Goods recruits workers from the BRAC borrower base, and BRAC branches double as depots and field offices.

Partnerships

Social enterprises, NGOs, and microfinance institutions frequently pilot and develop the business model, recruit and train CHWs, source and provide commodities, and collaborate with partners in developing technology. Embedding the program within a microfinance organization has provided synergies that facilitate recruitment, awareness-raising, business model development, and cross-subsidization. The Sajida Foundation, a microfinance organization in Bangladesh, provides health insurance to all of its borrowers. It has created a network of CHWs to bring healthcare services directly to them or refer them to one of Sajida's hospital or care networks.

Partners from the public or private sector provide ICT. Click Diagnostics, a global mobile health enterprise, facilitates technology and connectivity for SAJIDA Bandhu. The Birla Institute of Technology and Science supports the development of training modules for Arogya. Fortis Hospitals provides medical input into the development of computerized treatment protocols that are loaded onto mobile platforms and used by CHWs.

Implementation: Delivering Value to the Poor

Awareness

CHWs create awareness through health education and promotion and the creation of demand for specific health services. They have played a crucial role in building demand for reproductive health services in rural India, helping the Merrygold network expand, for example.

Acceptance

The model aims to maximize community acceptance in a number of ways. Arogya workers receive communication training that emphasizes the use of the local vernacular. It uses the term *panna* (named after a 16th century inspirational nursemaid) rather than *health worker*, which it believes lacks dignity. It uses television series and Bollywood films to impart patient-communication skills to *pannas*. Arogya also increases acceptance by hiring young people, who need the work.

Following its realization that communities accept CHWs only if they perceive them to deliver immediate benefit, Arogya adapted its approach to offer vision and hearing tests. Some models (such as CommCare) design software applications to be adaptable to different contexts and operated through locally available, inexpensive, Java-enabled phones as well as Android smartphones (WHO 2013).

Accessibility

By coming to where people live, including their homes, CHWs overcome the challenges and barriers faced by communities in accessing care. Living Goods' health entrepreneurs, Arogya's *pannas*, SAJIDA's *sajida bandhus*, and Bandhan Health's health volunteers all provide door-to-door services. M-Afyah provides care through kiosks. The Real Medicine Foundation's community nutrition educators (CNEs) link families to services they are either underutilizing or unaware of, while providing service providers with inputs.

Affordability

Services are usually free or subsidized. Arogya facilitates access to free medicine (using the government of India's free medicine database) to help poor patients save on prescription drug costs (Sustainable Innovations n.d.). Living Goods cuts out unnecessary layers of resellers and harnesses the buying power of a network of 1,200 health entrepreneurs to increase availability and decrease the price of high-impact products, according to the enterprise. M-Afyah kiosks use the M-Pesa mobile money system for client payments, reducing banking costs.

Results and Cost-Effectiveness

Scale and Reach

CommCare, which operates in India and South Africa, engages thousands of CHWs, serving up to one million beneficiaries. Living Goods reports that it has supported 154,000 pregnancies, treated 564,000 children for potentially deadly diseases, and sold more than 58,000 clean-burning cook stoves since 2007. M-Afyah kiosks served 2,500 clients (almost 300 per kiosk) between September 2013 and March 2014 (Health Enterprise Fund n.d.). Bandhan Health Program reports having almost 600,000 beneficiaries.

Improving Outcomes

Robust evidence indicates that CHWs can contribute to improved health outcomes. A randomized controlled trial evaluation found that Living Goods reduced mortality among children under five by 25 percent and increased the likelihood of home visits in the first seven days after delivery by 72 percent

(Björkmann-Nyqvist, Svensson and Yanagizawa-Drott 2013). Automated SMS reminders from Living Goods to parents of sick children and pregnant women have increased healthy pregnancy practices and visits to doctors, according to the company.

A Cochrane review¹ of 132 randomized control trials from around the world shows that CHW programs increased immunization uptake, proper breastfeeding practices, and care-seeking for childhood illnesses; increased tuberculosis cure rates; and reduced child morbidity and mortality (Lewin and others 2010).

CHWs facilitate individuals' navigation through the health system, leading to better decision-making about when to invest time and money on consulting a health professional. CommCare increased the retention of health-related knowledge among CHWs and helped them keep up with scheduled visits (Kumar 2012). A validation exercise conducted by Mashavu (A social enterprise, Mashavu works with CHWs to track village-level health) in Kenya showed that CHWs made the correct decision about whether a patient should see a doctor 87 percent of the time.

Initiatives can also reduce prices. The arrival of Living Goods in Kenya and Uganda forced private pharmacies to improve the quality and reduce the prices of their offerings. After Living Goods entered a market, the price of antimalarial drugs fell by 18 percent, there was a 20 percent reduction in counterfeit drug sales, and use of antimalarial medicine rose 39 percent (Björkmann-Nyqvist 2013).

CHWs collect data that are often shared with other public health stakeholders. These data improve health management and planning. Health facilities in India, for example, used data generated by Arogya's CHWs to meet their monthly reporting obligations and provide early warnings about health epidemics.

Cost-Effectiveness

Standardization and separability are instrumental to making the model a cost-effective alternative (Castano 2014). Standardization allows tasks to be shifted from higher-qualified human professionals (such as doctors and nurses) to CHWs with little formal training. Medical conditions for which diagnosis and treatment are highly standardized, such as diarrhea and malaria, lend themselves to being delegated to CHWs. Separability means that a task can be performed without equipment and supplies, allowing services to provide at home.

Although the public health system provides many goods and services for free, poor people are still often unable to afford them, because they cannot afford the time and money cost of reaching the facility. Providing services at home brings services to people who might not otherwise have been able to access them.

Scaling Up

Challenges

CHW programs work best when they make good use of ICT. ICT is also important to donors, who prioritize funding to technology components. Using ICT requires infrastructure, mobile connectivity, and skilled staff (both to troubleshoot and repair devices and analyze data), however, not all of which are available in poor communities.

¹ Cochrane Reviews are systematic reviews of primary research in human health care and health policy, and are internationally recognized as the highest standard in evidence-based health care resources

Alignment with the national health system is also important. Arogya initially faced problems getting buy-in from local public health facilities, whose staff perceived it as a competitive threat. It found that sharing the data its workers collected with local health facilities was an important incentive to local health staff to collaborate.

Business models that ensure profitability for CHWs as well as the social enterprise or microfinance institutions are still evolving. Arogya found that its CHWs earned too little to maintain a reasonable standard of living. It therefore decided to share income from the sale of data with them to top up their monthly income.

The CHW model is effective in dealing with simple medical issues. It is not appropriate for complex, experience-based diagnosis and tailored treatment or services that require specialized medical equipment and facilities. The model also depends on a health system that can absorb the increased demand generated through health promotion and referrals.

Role of Government and Public Policy

Governments have been working with CHWs for decades, setting up and running major schemes. Market-based approaches can thus rely on a wealth of experience and evidence about success factors.

Links between CHWs and higher levels of the health system are key. In Uganda, Living Goods works closely with district health teams, which are engaged in recruiting and interviewing, quarterly supervision exercises, and oversight of CHWs. Living Goods has also made an effort to hire and support trained government CHWs wherever they are available and interested and meet its standards. More than a third of Living Goods' CHWs are government-trained. Bandhan Health Program's workers are also trained to liaise with governmental health officials and participate in national health campaigns.

The government of India has invested heavily in CHWs. CommCare complements this community-based public health strategy by providing a mobile platform that improves their performance and can be tailored to a range of local contexts (WHO 2013). SAJIDA's CHWs are connected with health professionals in the formal health system via an mHealth platform provided through a partnership with Click Diagnostics, a global mobile health social enterprise. Living Goods is integrating its treatment and pregnancy registration data with the government's health information system. Arogya CHWs support reporting by public health facilities by providing them with community data.

Policy and regulation can also help harmonize CHWs' roles and responsibilities and provide clear standards and protocols to ensure quality. Regulation may consider what happens to other businesses if health entrepreneurs are crowding out existing vendors, as has happened in the case of Living Goods. Government training programs must take into account CHWS supported by market-based approaches to ensure quality and that the patients' interests are the foremost concern.

Providing incentives to CHWs is essential to reduce attrition. Where direct payments are not possible, training, supervision, and other nonfinancial incentives are key. They can be co-financed by the government or linked to government training programs. Incentives can include hiring CHWs in public health campaigns.

CHW models require initial donor investment. Many permanently depend on grants. Living Goods, for example, is highly cost-effective, but it still relies on grant funding to cover total operational costs.

Where business models have proven successful, governments may consider financial and administrative support for replicating them in other parts of the country. The government of India has

expressed an interest in adopting the Arogya model for its National Rural Health Mission if success can be demonstrated in 100 villages.

Table 1. Descriptions of selected CHWs initiatives

Enterprise	Description	Business model
<u>Sustainable Innovations Arogya Triage@Home</u> (India)	<p>Delivers maternal and child health care services door to door at extremely low cost. CHWs use health data repository and electronic medical records.</p> <p>Reach: Started with 15 villages, covering 45,000 people.</p>	<ul style="list-style-type: none"> CHWs charge consultation fee and, as entrepreneurs, are free to offer additional services. Revenue creation through sale of data collected by CHWs and processed through mobile systems (revenue to be shared with CHWs). Use of data to build predictable revenue streams for CHW. Facilitates public sector facilities' work by doing reports on their behalf. Primary CHW function: Health educator; data collector; service provider Incentives: Financial: revenue; Non-financial: training (medical, business, communication). ICT: Computerized treatment protocols for common ailments and preventable diseases loaded onto mobile platform (tablet or laptop) equipped with diagnostic devices (camera, blood pressure meter, etc.); creating an electronic medical record for every individual; relayed to local health facilities for diagnosis and treatment advice to be distributed via text message to CHWs.
<u>Bandhan Health Program</u> (India)	<p>Creates health awareness among mothers and adolescent girls, ensures accessibility to health services, reduces health expenditures of poor families, and develops health micro-entrepreneurs.</p> <p>Reach: 17,200 health forum participants, 592,000 beneficiaries (cumulative).</p>	<ul style="list-style-type: none"> Cross-subsidization of health program through microfinance revenues. CHWs provide health education and distribute health kits. Primary CHW function: Health educator; health kit distributor. Incentives: Financial: revenue (sale of health kits); Non-financial: training, including training on liaising with government officials.
<u>Sajida Bandhu</u> (Bangladesh)	<p>Provides basic healthcare services to SAJIDA Foundation's microcredit members and project beneficiaries through CHWs.</p> <p>Reach: Two hospitals close to the community; covering 15,000 beneficiaries in pilot phase.</p>	<ul style="list-style-type: none"> CHWs focus on health education and provision of basic services. Sajida hospitals financed through revenue from Sajida Microfinance receive membership/subscription fees for healthcare card and out-of-pocket (OOP) payments. SAJIDA member families currently recruited from micro-finance participants. Primary CHW function: Health educator; service provider. Incentives: Financial: revenue; Non-financial: health education, microfinance and micro insurance education, mentoring, provision of mobile/laptop. ICT: CHWs collecting health info through mobile technology (Click Diagnostics), incoming data monitored by SAJIDA doctors.
<u>CommCare</u> (Global)	<p>Open-source mobile health platform used by CHWs to store and access patient information and monitor at-risk patients; enables healthcare program staff to monitor health workers' performance through online reports.</p>	<ul style="list-style-type: none"> Dimagi employs a tiered pricing model for CommCare services that aligns with each client's health program size and development requirements. Additional revenue collection from premium user and domain services, transaction costs on SMS, and incremental consulting fees. ICT: Mobile job aid to assist CHWs to reach community members; software includes registration forms,

	Reach: More than one million patients worldwide since 2002.	checklists, danger sign monitoring tool, educational prompts.
<u>Living Goods</u> (Kenya, Uganda)	Provides healthcare services and products and sells essential health products door to door at prices affordable to the poor. Reach: Supported 154,000 pregnancies, treated 564,000 children, and sold 58,000 clean-burning cook stoves (cumulative).	<ul style="list-style-type: none"> • CHWs act as independent agents and sell health and other commodities, similar to a franchise. • CHW receive a below-market inventory loan and free “business in a bag”. • Cross-subsidization of prices to allow for affordability of high impact items. • CHWs recruited from BRAC borrower base; BRAC branches double as depots and field offices. • Primary CHW function: Vendor • Incentives: Financial: revenue; Non-financial: training, field mentoring and performance monitoring • ICT: Mobile technology for quality control and patient monitoring; automated SMS reminders to parents of sick children and pregnant women to increase adherence.
<u>M-Afya Kiosks</u> (Kenya)	Provides access to basic reproductive health services, antenatal services, and postnatal and well-baby follow-ups and monitors chronic diseases through health kiosks in rural and underserved urban areas. Reach: 2500 clients served (between September 2013 and March 2014) by 9 outlets.	<ul style="list-style-type: none"> • Network of kiosks operated by CHWs or nurses, stocked with basic medical equipment and supplies. • Progressive buyout of 30–50 percent by CHWs and nurses envisaged. • Doctors and clinicians provide mentoring and supervision to CHWs and exercise limited ownership of the kiosks to ensure accountability and quality control. • Primary CHW function: Kiosk operator; service provider • Incentives: Financial: revenue; Non-financial: training, mentoring, supervision. • ICT: Using M-Pesa for client payments to CHWs.
<u>Merrygold Health Network</u> (India)	Provides access to low-cost maternal and child health services by networking with private health service providers as franchisees. Reach: 145,000 visits to Merrygold outlets by 2014.	<ul style="list-style-type: none"> • Social franchise where CHWs perform outreach function and create awareness and demand. • Franchisees generate revenue through a specialization and a low cost, high volume strategy; patients pay out-of-pocket or through insurance schemes. • Franchisor receives membership and royalty fees from franchisees. • Primary CHW function: Outreach workers for awareness and demand creation. • Incentives: Financial: performance-based monthly reward; Non-Financial: training.
Tunza (Kenya)	Recruits and trains private practitioners to provide a range of contraceptive methods while promoting uptake in the community; provides access to good-quality and affordable healthcare services, including screening for cervical cancer and sexually transmitted infections, HIV counseling, male circumcision, and childhood diseases. Reach: 710,000 visits to Tunza outlets by 2014	<ul style="list-style-type: none"> • Social franchise where CHWs perform outreach and create awareness and demand. • Franchisees generate revenue by pricing their services to the patients. • Franchisor is in the process of becoming financially viable and will generate revenue through mass procurement and sale of commodities, training packages, brokerage fees for affiliated services (labs, etc.), an increase in franchise fees and introduction of royalty payments for high-income franchisees. • Primary CHW function: Outreach workers for awareness and demand creation. • Incentives: Financial: monthly reward; Non-Financial: training.
<u>Real Medicine Foundation</u> (India)	Focuses on awareness, identification, treatment, and prevention of malnutrition through use of local community nutrition educators and ICT for tracking and data collection.	<ul style="list-style-type: none"> • Primary CHW function: Outreach workers for awareness and demand creation. • Incentives: Financial: monthly salaries and paid travel expenses.

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Profile: Sustainable Innovations/Arogya

Using information and communications technology to provide basic health services door to door

SUSTAINABLE
INNOVATIONS

Challenge

India accounts for almost a fifth of all global maternal deaths (WHO 2013) and a third of all first-day deaths (Save the Children 2013). It also suffers from a doctor shortage, with just 70 doctors per every 100,000 people (WDI n.d.).

The challenge is to provide health care without relying heavily on doctors, especially in rural areas. One strategy for doing so is to provide every village with an Accredited Social Health Activist (ASHA), a village woman who act as an interface between the community and the public health system. ASHAs are contributing to improvements in maternal, newborn, and child health and reductions in associated mortality. More than 820,000 have been trained since 2006, with a focus on preventive care, such as counseling women during pregnancy, accompanying women during delivery, promoting immunizations, and improving newborn care.



This health care provider travels with a portable clinic—a laptop equipped with a camera, an oximeter, a blood pressure meter, a peak flow meter, and computerized treatment protocols.

Innovation

Sustainable Innovations (SI) has adapted the CHW model with a view to becoming financially sustainable in the next few years. Its Arogya Triage@Home program (<https://www.si-usa.org/arogya>) delivers health check-ups and diagnostic services to people in rural communities in Rajasthan by sending *Pannas* (a term for CHW that has more positive connotations) door to door.

SI trains young women from the community with secondary education to address common ailments and preventable diseases, such as diarrhea, anemia, reproductive system diseases, worm infestation, and asthma, and conducts hearing and vision testing. In addition to providing medical services, *Pannas* conduct seminars and meetings at local schools to raise awareness about hygiene and disease prevention methods.

Pannas own their care delivery enterprise; they are social entrepreneurs rather than employees. SI provides them with a portable clinic—a laptop equipped with diagnostic devices such as a camera, an oximeter, a blood pressure meter, a peak flow meter, and computerized treatment protocols. The equipment cost per CHW is approximately USD 1,000–1,200, which includes equipment, laptop, and diagnostic devices and is paid by Arogya.

Pannas relay their findings to health professionals at public facilities for review, advice, and intervention in real time. The Fortis Health Care Foundation provides pro bono physician consultation at Fortis Hospitals. The professionals' response, which may include a recommendation to come in for a consultation, is then communicated to the patients in real time.

Each *Panna* operates its own portable clinic enterprise and prices its own consultations (regular consultation generally cost USD 0.40, with an extra fee sometimes charged for additional services).

The more visits a *Panna* makes, the more she earns. It is estimated that *Pannas* earn approximately USD 200 a month from consultations.

SI collects vast amounts of data on patients. It strips the data of patient identifiers and sells the electronic medical records to public and private institutions, including research institutes and pharmaceutical companies. The company shares some of these earning with the *Pannas*, bringing their average monthly income to approximately USD 300–400.

Impact

Arogya is currently serving about 45,000 people. Grants of USD 400,000 from the Merck Foundation and the Jain Foundation will be used to roll out the model and reach another 100,000 people. The program has also created income opportunities for young women in 15 villages. The holistic model includes innovative components that are being refined to become sustainable.

Scaling Up

Scaling up depends critically on buy-in—by communities, local health facilities, and the government. Soon after the project began, SI recognized that it would succeed only if villagers saw immediate results. To do so, it began offering vision and hearing testing (Bitsaa International 2012).

The program initially faced problems of buy-in from local public health facilities, whose staff perceived it as a competitive threat. Buy-in was achieved after the facilities recognized that the *Pannas'* reports could help them meet their reporting obligations and provide them with early warning of epidemics. Government buy-in was facilitated by providing it with a reliable channel through which to distribute information (on free drugs, for example).

Before being able to replicate on a larger scale, SI will have to first prove to the government that the model works in 100 villages in Rajasthan. It will then need to conduct a feasibility assessment and present a project plan for an additional 1,000 villages, demonstrating that the model can work on a larger scale. If it succeeds, the government may adopt the Arogya model more widely through its National Rural Health Mission and roll it out as a public-private partnership with SI.

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Profile: Living Goods

Using female micro-entrepreneurs to provide essential health products to rural homes



Challenge

Millions of people in Uganda lack access to basic medical care. Public health facilities provide free treatment of malaria and other life-threatening diseases, but the indirect costs of care, including transport and lost work, make treatment unaffordable for many people, and drug stock-outs are common.



Where barriers to access exist, patients often rely on informal and unregulated private health outlets, many of which dispense counterfeit drugs. The challenge is to reach poor people with affordable medicines and basic medical care.

Innovation

In Uganda CHWs—whom Living Goods (www.livinggoods.org) calls *micro-entrepreneurs*—go door to door selling medicines, health products and services, and household goods. Services include education and counseling on family planning; registration and tracking of pregnancies by mobile app; prenatal care; and diagnosis and treatment of diarrhea, malaria, and pneumonia. Products include contraceptives, clean delivery kits, medicines for common childhood diseases, fortified foods, and household goods, such as detergent, solar lights, clean cook stoves, and water filters. To make essential medicines affordable, Living Goods sells them at up to 30 percent below market prices.

Micro-entrepreneurs must be literate in both the local language and English and live in the geographic location where they operate. They receive three weeks of training on the basics of health care provision and common diseases, as well as refresher training and supervision.

To start their micro-franchise, micro-entrepreneurs receive a below-market loan, which they pay back out of their earnings within 48 weeks. They use the loan proceeds to purchase stock from the Living Goods headquarters, which purchases in bulk from a single supplier and directly from manufacturers. Living Goods pays its micro-entrepreneurs based on performance (for identifying pregnant women and visiting newborns within the critical first 48 hours of life, for example) and allows them to retain 15–20 percent of their sales. The average micro-entrepreneur works part-time and earns a monthly income of approximately USD 15–20.

Living Goods equips micro-entrepreneurs with a smartphone with apps that help them register and support pregnant women, accurately diagnose childhood illnesses, send SMS adherence reminders, and ensure effective follow-up. Its analytics and reporting system provide real-time data to drive rapid, informed decisionmaking at every level of operations. The vast mobile phone coverage even in rural areas enables villagers to contact their micro-entrepreneur around the clock.

Living Goods partners with the government of Uganda in recruiting and training micro-entrepreneurs. In some areas, district health teams are engaged in the recruiting and supervision process. In other areas, Living Goods trains government CHWs.

Impact

The 1,200 micro-entrepreneurs who work for Living Goods Uganda serve nearly one million people. Their work has reduced child mortality by more than 25 percent, according to Living Goods, and decreased the sale of counterfeit drugs, by both raising awareness of the existence of such drugs and reducing the average price of legitimate antimalarial drugs by 15–20 percent.

Scaling Up

Living Goods' micro-franchisees are financially viable, and the organization is highly cost-effective, costing less than USD 2 per person per year. It continues to rely on grant funding of approximately USD 8 million to cover its operations in Uganda and Kenya and its advocacy and partnerships team.

Quality assurance and reputational risk are key challenges in growing the model. Living Goods understands that it must maintain and improve service quality as it grows rapidly so as not to undermine its credibility in the community.

Living Goods' strategy increasingly relies on working with partners to implement replications of the model at scale. Partners include social marketing organizations such as PSI and MSI, as well as large NGOs such as CARE Zambia. Working with major multinational NGOs is at the core of Living Goods, which started as a collaboration with BRAC Uganda. Although such partnerships carry significant opportunities for Living Goods, they also imply accepting a higher-risk strategy, because they involve less control and influence over operations.