CASE STUDY



ClickMedix: Boosting access to medical treatments through technology



Initiative Description

In 2013, ClickMedix joined the Business Call to Action with a commitment to train more than 1,000 community health workers in the use of mobile smartphone technologies to help them improve care for at least 1 million underserved patients by 2020.

ClickMedix's goals by 2020 are to:

- train more than 1,000 mostly young, female community health workers in the use of ClickMedix mobile telehealth tools for health screening and provide needed care;
- enable 100% of trained health professionals to increase their daily incomes; and
- improve the health outcomes of 1 million underserved patients.



Photos this page: Grameen Vida Sana Membership Program for Underserved Women and their Families



Business Model

In developing countries, millions of people still die from diseases that can be diagnosed and treated.¹ There are four main reasons for this:

- Patients living in rural areas or urban slums lack physical access to care.
- There are too few health care professionals in existing hospitals and health centres – or they lack proper training.
- Patients often lack the financial means to pay for available services,
- Patients often lack knowledge or awareness that their symptoms can be treated, or where to seek treatment

ClickMedix is a global mobile health (mHealth) and education social enterprise that addresses these challenges by providing technology for low-cost medical treatment of hard-to-reach patients. The company has developed a mobile We've established a mobile health technology that can literally help doctors serve 4 to 10 times more patients than they do today. At the same time, the technology enables community health providers to effectively screen, triage, and in some cases, treat patients through the help of remote medical specialists. That's how we can bridge the gap between the shortage of doctors and the increasing demand for health care services in most countries around the globe.

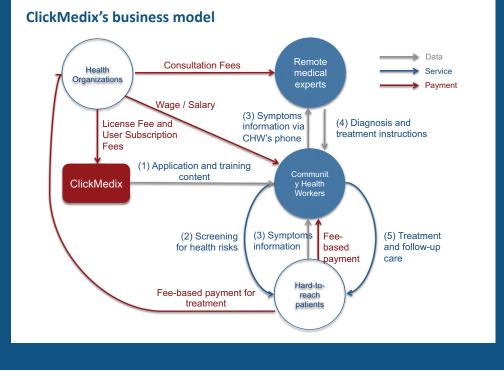
Ting Shih founder and CEO, ClickMedix

phone application to screen for health risks; health workers are trained and equipped with the application for a user license fee. The application is based on clinical protocols that are converted into a series of questions. Health workers can access these questionnaires through smartphones or tablets during home visits, community

¹ According to the Disease Control Priorities Network (DCPN) and the World Health Organization (WHO) in 2001 32.2 million people died globally from preventable diseases.

health events, or in health clinics. The data gathered in each health screening is sent to a remote medical expert. The doctor reviews the data and responds with a clear diagnosis and treatment instructions. Health professionals can access doctor's response, and then administer the treatment, follow up with patients and promote further monitoring as well as preventative care. More serious cases are referred to a hospital for specialized treatment.

This business model creates value for all involved. Underserved patients are able to receive high-quality individual care and treatment earlier than ever before (< 3 days instead of months, some times years); health workers can increase their incomes and improve their skills; and doctors can treat more patients. Furthermore, the health worker can help the patient identify the appropriate treatment facilities, help schedule appointments, and arrange for transport if needed. Utilizing mobile technology, ClickMedix has initiated mobile health programs in 15 countries. The company has helped to expedite life-improving treatments for patients with diabetes, heart conditions, cancer, ear infections, and HIV/AIDS while creating jobs for home-based and community health professionals.



How it Works

ClickMedix was founded in 2010 as a technology service enterprise by students from the Massachusetts Institute of Technology (MIT) and Carnegie Mellon University. Its business model combines innovation, entrepreneurship and partnerships to provide cost-effective diagnosis and treatment to low-income communities.

Technological and business innovation

ClickMedix created a unique healthcare delivery platform that can be accessed through mobile phones, tablets, or computers to handle medical consultation requests from anywhere in the world without the physical presence of a doctor. The ClickMedix application can either be installed on a smartphone or accessed through a web browser, allowing for end-to-end healthcare delivery and care management among frontline health workers, physicians and remote specialists.

Trained health entrepreneurs at the front line

Community-based health workers act as the hands and eyes of remote doctors, transmitting descriptions of symptoms using best-practice disease assessment protocols, diagnostics devices, images, and video recordings of the patient through the ClickMedix platform. The health workers receive two days of technical training in using the ClickMedix application, followed by two days of supervised screening with actual patients. With every consultation request, each community health professional attains practical knowledge about how to treat patients with commonly occurring conditions – which empowers health workers to provide better care. In India, ClickMedix expects to help train at least 200 community-based health professionals each year for five years.

While the initial health screening is free, the health entrepreneurs get paid through a fee-based treatment service or by selling nutrition or health care products. The fees are either generated by patients receiving the products or services, or by health organizations subsidizing the costs on behalf of patients.

Generating impact through partnerships

To reach scale, ClickMedix collaborates with local and global partners. In July 2013, the enterprise set up a partnership with Medtronic, one of the world's largest medical device companies, to rapidly scale up Medtronic's Shruti programme offering ear screening services in India. Ear infections can be easily diagnosed via otoscopy and hearing tests, and some treated with antibiotics or outpatient surgical procedures. However, because many patients in India lack access to adequate treatment, there is still a 17 percent ear infection rate, causing partial or complete hearing loss.² For Medtronic, this partnership has helped it to reach many more patients at the bottom of the pyramid, while ClickMedix has expanded its market share in India.

Results Achieved

To date, ClickMedix technologyenabled initiatives have been deployed in 15 countries. The company has worked with more than 43 clinics and hospitals, and three medical research and training institutions to reach more than 700,000 people. At the same time, the company has trained hundreds of community health professionals and created new jobs.

Business Impact

Since launching the business in mid-2011, the company reached its break-even at the end of 2013 and is now financially self-sustaining with exponential growth in revenues. ClickMedix's activities have so far been financed through its founder along with funding from friends and family. The company has also received over US\$100,000 in grants and awards. In addition, ClickMedix is looking for additional partners to scale its offerings as well as investments.

ClickMedix's revenue is primarily generated through the sale of licensed software: the company receives a one-time setup fee and monthly user license fees from health providers who use the software. In addition, ClickMedix provides ongoing support for technology development and maintenance to partner organizations at an affordable cost. Besides these direct financial benefits, training thousands of health professionals increases its user base and broadens the market share of ClickMedix technology.

Development Impact

ClickMedix already enables low-cost health services as well as high-quality health care diagnosis and treatments to reach over 700,000 underserved patients at the bottom of the pyramid. It is only possible to reach so many patients through partnerships with other organizations. For example, by joining forces with Medtronic, the company



ClickMedix partnership with Medtronic, "Shruti" program, has reached more than 100,000 patients with just 10 health workers during last 20 months.



can cover ten times as many patients as usual within the Shruti programme.

While patients pay a fair price for their treatment, they also receive their diagnosis and treatment plan faster (in less than 72 hours instead of months), and avoid unnecessary travel and related costs by being connected with remote doctors. Instead of spending a lot of time reaching medical experts, they can simply address their problems through health workers in their communities. For the health workers, this business model increases income opportunities. For doctors, it increases productivity and reach, and related revenues: the application enables each doctor to diagnose and treat up to four times more patients than could be seen in person.

The ClickMedix model also enables knowledge to be transferred from specialized doctors to local health professionals, which builds capacity and improves skills among community health workers.

Key Success Factors

Investing in an untapped market

ClickMedix's business model addresses the giant untapped market of underserved low-income patients seeking effective medical care. Through mobile technologies, ClickMedix has enabled affordable healthcare services to reach patients in remote areas or underserved patients with tremendous potential to scale up to serve even more patients.

Using the multiplying effect of modern technologies

ClickMedix's innovative technology is easy to use because of its one-click model and is easy to share because of its integration into smartphones and tablets. This enables the company to rapidly scale up into different countries and health conditions as well as service delivery methods.

Scaling through partnerships and training

Operating through partnerships, Click-Medix has already achieved considerable scale. However, its scaling efforts will not stop here. For Medtronic Shruti programme, ClickMedix will be used to standardize the training into a series of

Innovations

that improve lives

certification course modules and partner with India-based training institutions, health facilities and NGOs to replicate the model in other regions. These efforts will help its partners and the company grow further through increased per-user subscription and licensing fees.

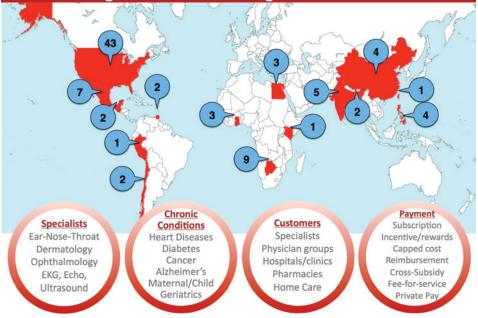
Creating value for all players involved

Underserved patients now have the possibility of receiving high-quality individual care and treatment; community health workers can increase their incomes and improve their gualifications; and doctors are reaching new patients in underserved areas and treating up to four times more patients than before.

Next Steps and Spin Off Effects

With a number of new partnership programmes in place, ClickMedix has plans to replicate its healthcare delivery model in China and across South Asia, Latin America and the Caribbean. By drawing on mobile technology and ClickMedix's past experience, replicating the business model can be achieved easily and cost-effectively.

In 3 years, ClickMedix has been deployed in 15 countries, through 90 sites addressing different diseases







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