3-minute case study: The doctor will chatbot you now

By Lia Novotny  | June 20, 2018

What innovations drive success in healthcare? Here's a tactic to borrow from beyond our borders.

The problem

With just one physician for every 12,000 people, Rwanda's people endure long lines at local clinics or no healthcare at all. While waiting for care, however, Rwandans may be talking or searching the net on their mobile phones: More than 8 million citizens — 72 percent of a country with one of the fastest growing economies in Africa — subscribe to cell phone services.

Could a thriving mobile phone industry increase Rwandans' access to healthcare?

The solution

In September of 2016, the Rwandan Ministry of Health partnered with London-based startup Babylon Health and the Bill & Melinda Gates Foundation to launch a mobile phone app that gives any citizen instant, free access to expert health advice.

Rwandans can download the app, called "babyl," and register to be connected to a chatbot that uses artificial intelligence and machine learning to triage medical problems. The app offers treatment recommendations for simple conditions or, when appropriate, sets up an appointment to talk to a physician by phone or video. Consultations typically cost about 65 cents each. Patients without access to a mobile phone can visit babyl booths equipped with tablets and phones at various pharmacies.

A team of 25 physicians employed at government hospitals staff babyl. Speaking Kinyarwanda, English and French, the doctors diagnose conditions, recommend labs, and even issue prescriptions directly to patients' mobile phones.

"It's about giving a patient quick access to a doctor," explains Shivon Byamukama, M.D., deputy CEO of Babyl
The outcome

In two years, more than 2 million Rwandans — or 30 percent of the population — have registered to use the app. Five hundred residents of rural villages are employed as babyl ambassadors to introduce their community to it. In its first year, Babyl Rwanda has had 600,000 registrations and more than 100,000 consultations.

"Rwanda has quickly become a model of how to make crisis an opportunity by investing in a technology solution," says Kirsten Meisinger, M.D., medical staff president at Cambridge Health Alliance. "Realizing that there was a complete lack of infrastructure, mobile phone technology directly empowers patients. Consumers in the U.S. are using similar technology for everything other than healthcare — perhaps now is the time for us to learn from our neighbors and make the leap."

Lia Novotny is a frequent contributor to athenainsight.