



## Co-Emergence

Catalyzing new markets for  
health and education

# Winning the Fight Against Fake Drugs

## Synopsis

### The Problem

The World Health Organization estimates that, on average, 10% of the drugs sold worldwide are fake, from 1% in the U.S. market to up to 30% in developing countries. Counterfeiters target any drug — branded or generic — from medicines for malaria, tuberculosis, HIV, or cancer to those for chronic diseases, as well as diagnostic tests, medical devices, and veterinary drugs.

The scale of the problem has increased exponentially over the past 10 years, and the consequences of fake drugs are alarming.

According to the International Policy Network, every year “approximately 700,000 deaths from malaria and tuberculosis are attributable to fake drugs” (Harris, 2009). Fake drugs not only prevent patients from recovering, but also may contain harmful toxic elements, leading to increased morbidity and mortality. Some of the drugs include a limited amount of active ingredients, mainly to pass detection tests conducted by authorities, increasing the risk of one of today’s most pressing health emergencies: drug resistance.

### Fake Drugs in Emerging Markets

- Between 30% and 50% of **anti-malarial medicines** in Southeast Asia and Sub-Saharan Africa are fake (Nayyar, 2012).
- In Ghana, 89% of ampoules of **uterotonic drugs** (to prevent post-partum hemorrhage, the primary cause of maternal death) do not meet the specifications for active ingredients, mainly due to counterfeit medicines and noncompliance with cold chain guidelines (Stanton, 2012).

### Causes

Inadequate regulations and drug licensing as well as poor legal enforcement contribute to the problem. The recent increase in demand and access to health services around the world has created unmet needs, which counterfeiters quickly fill. Detection tools such as the GPHF-Minilab, Raman, and near-infrared spectrometers are expensive and can only test a small percentage of the medicines on the market. Existing technologies to track and trace medicines (such as RFID and QR codes) are effective, but low-margin generic manufacturers cannot afford them. Less expensive, SMS-based technologies have been developed for markets in Sub-Saharan Africa and Asia. This represents significant progress, but gaps remain: labels can be expensive; SMS-based technologies do not enable controls along the supply chain; and logistics and market information collected are limited.

### The Co-Emergence Vision

We aim to incubate an affordable and reliable business solution for developing country markets that will enable higher visibility and product authentication along the supply chain by manufacturers, wholesalers, retailers, and patients at the time of purchase.

We believe there will be a business case for manufacturers to invest in such a solution in those markets because it will lead to:

- Significantly reduced risks of counterfeits
- Increased patient confidence in the product/brand, improving manufacturers’ reputation and market share

- More sophisticated market information (currently very poor in Africa and Asia)
- Improved logistics efficiency and lowered cost (for example, inventory and warehouse management, cold chain, product monitoring and availability, recall management)
- Opportunity to increase patient compliance with drug regimens, improving their chances of recovery and reducing the risk of drug resistance. Once the product is authenticated, patients will have the option to sign up for SMS reminding them about drug dosage and schedule or to be connected to (chronic disease) peer-support groups, where they exist.

## Approach

Based on in-depth market and supply chain assessments and interviews with key stakeholders from pharmaceutical companies, actors along the supply chains, to patients in emerging markets, Co-Emergence is designing a disruptive business solution that fits into our vision. The next step is to pilot the solution with one or a group of manufacturers in one country in Africa or Asia. The pilot will build evidence around feasibility, efficacy, effectiveness and cost in order to build the business case around the proposed solution. We plan to leverage financial and technical support from social impact investors as well as foundations and donors involved in the fight against fake drugs (such as the President's Malaria Initiative, the Bill & Melinda Gates Foundation, the Global Fund, and others).

## About Co-Emergence

Co-Emergence was founded in early 2013 with the mission to nurture and scale up market-driven solutions to increase access to high-quality, affordable health and education services in emerging markets. Co-Emergence incubates the development of high-potential innovations and provides hands-on strategic and management support from seed to scale. To leverage all relevant resources and skills, we facilitate cross-sectoral alliances, involving private companies, governments, donors, and civil society. For selected projects, we also provide early seed investment through our sister organization, Co-Emergence Capital. Ongoing projects include a partnership with the Bill & Melinda Gates Foundation and FHI 360 to facilitate private sector engagement to reduce stunting in Africa and Asia. Co-Emergence has offices in New York City and Washington DC.

**Claire Champion**, Founder and President of Co-Emergence, has more than fifteen years of experience working at the nexus of public and private sectors, designing and implementing technical and organizational strategies to strengthen health systems and facilitating cross-sectorial partnerships. Her experience includes running a 20,000-refugee camp in the Democratic Republic of Congo; leading social marketing initiatives for family planning, water, and malaria products and services in Afghanistan; building the capacity of the Ministry of Health in Mozambique to develop improved systems for malaria prevention and treatment; and developing and implementing strategies to increase access to affordable complementary foods for children 6-24 months in Bangladesh, Ethiopia, and Vietnam. She has consulted for the United Nations, the U.S. Agency for International Development, the Rockefeller Foundation, Accenture, Vestergaard Frandsen, Abt Associates, Chemonics International, and others around the world. She received her MBA from Harvard Business School and her Doctorate of Public Health from Johns Hopkins University. She is bilingual in French and English and conversant in Portuguese.

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