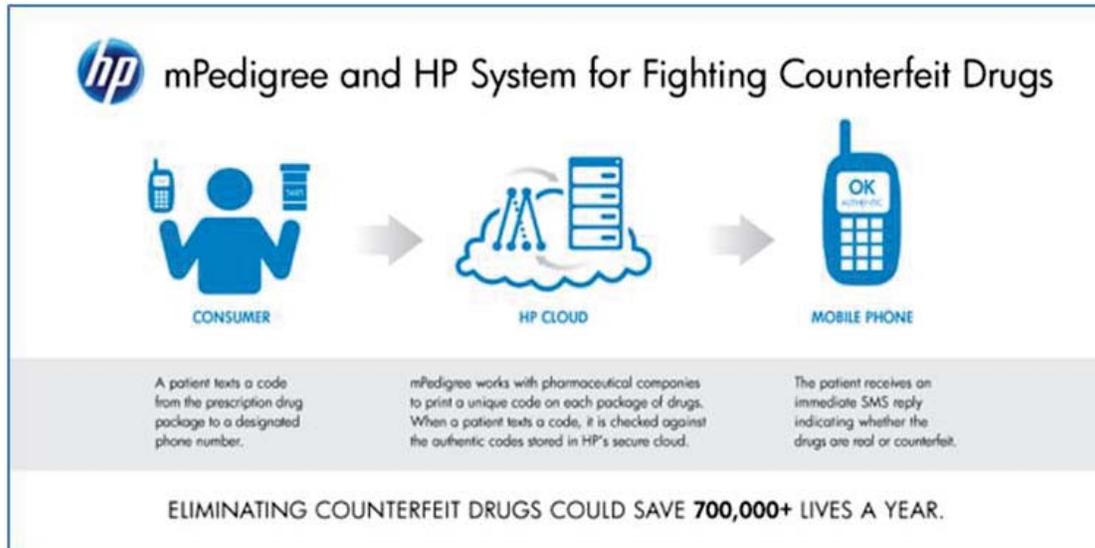


# mPEDIGREE



## BRIEF OVERVIEW

Counterfeit drugs are believed to be responsible for an alarming number of deaths, especially in the developing world. According to a study by Y.A. Chowdary et al., all types of products – whether affordable, expensive, generic or branded – are being counterfeited and emerge in community pharmacies, hospitals, and other less-regulated settings. Previous methods have been developed to combat the problem, yet proved unsuccessful. However, the use of ubiquitous information and communication technology (ICT) tools has proven to be more promising.

Bright Simons, a Ghanaian social entrepreneur, has developed a phone-based system called mPedigree to tackle the problem of counterfeit drugs. mPedigree is an innovative anti-counterfeit ICT software application that seeks to empower the consumer so that they have a way of verifying their medication's safety. Through the provision of a free text message service, users are able to verify the origin and authenticity of drug treatments before use.

The core technology was invented in 2005 and mPedigree was formally launched in Ghana in 2007. Since its launch, the service has expanded to India, Nigeria, East Africa and South Asia.

## ABOUT mPEDIGREE

mPedigree protects consumers from counterfeit drugs in regions with low literacy and low technical capacity. The model relies on negotiating deals with phone and drug companies and having manufacturers implement the program at the lowest possible cost. Matching the technology platform to regional infrastructure, Hewlett Packard (HP) created a cloud-based system that tracks pharmaceutical supply chain data on the back end, while leveraging the high mobile penetration in region for the consumer interface. The innovative system allows buyers to verify the authenticity of medicines for free by text messaging a unique scratch-off code found on the product to a universal number. This request is routed to mPedigree's servers and consumers receive a quick response to authenticate their purchase.

## EVALUATION AND RESULTS

Global partnerships have been developed with Fortune 500 companies, over two dozen telecom agencies, regulators, and pharmaceutical companies. In 2011, Themis Medicare became the first Indian healthcare company to sign up with the mPedigree Network. As of February 2013, mPedigree's verification codes have appeared on almost ten million packs of medicine in Ghana, Kenya, India and Nigeria. Four other countries are currently conducting a beta launch.

## LESSONS LEARNED

- An electronic resource system must be able to boost transparency in the marketplace and efficiency in the regulatory process
- Electronic resource systems should also facilitate the promotion of common standards and enhance the capacity of manufacturers and marketers of medicines to benefit from regional economies of scale
- Identifying collective interests, specifically loss of revenue for pharmaceutical companies and governments and the network expansion of local telecommunications companies, has allowed the network to secure support from the key constituents it needed to drive impactful change.
- A sound marketplace for medicines requires an enrichment of the partnerships between drug manufacturers, marketers, pharmacists and regulators

## CONCLUSION

Through an unparalleled integration across corporations, governments, and service providers, mPedigree is enabling consumers in the developing world to place absolute confidence in any medication they purchase or receive in the open market or from any provision outlet in the public sector. Fast, secure, and easily accessible in remote areas, the system addresses the main barriers to counterfeit monitoring and has helped avert the numerous deaths associated with patients ingesting counterfeit drugs. It is a strong example of how technology is meeting the challenge of identifying these dangerous and lethal drugs.



### GEOGRAPHIC COVERAGE

Ghana, India, East Africa, Nigeria, South Africa

### IMPLEMENTATION PARTNERS

Hewlett Packard, Orange Health, National Agency for Food and Drug Administration and Control in Nigeria (NAFDAC), Kenyan Pharmacy and Poisons Board (PPB), West African Health Organization (WAHO), Several Telecom Companies

### FUNDER

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### CONTACT INFORMATION

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#### Information was excerpted from:

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