

## M-PESA AND ACCESS TO HEALTH IN KENYA

- M-PESA is used to mobilize funds quickly to receive health care.
- Most use of M-PESA for payment of treatment is indirect.
- Health care providers are incorporating M-PESA into their service provision models to increase access.

BY SHERRI HAAS AND GEETHA NAGARAJAN, IRIS Center

# **THE MOST COMMON WAY** one hears Kenyans refer to M-PESA in relation to health care is as "emergency money"—funds received quickly to obtain immediate necessary treatment.

#### INTRODUCTION

Much is now written about M-PESA on its business model and extent of its use at the household and community levels. M-PESA is an agentassisted, mobile phone-based, person-to-person payment and money transfer system in Kenya. It allows users to store money on their mobile phones in an electronic account and deposit or withdraw money in the form of hard currency at one of M-PESA's numerous agent locations. By March 2011, M-PESA reached over 13.8 million registered users (over one-third of Kenya's population) through 27,000 M-PESA agents throughout the country. Safaricom has also built a low-cost payment platform in M-PESA which is allowing users to meet an ever-broader array of their payment and savings needs.

Little information exists, however, on the recent initiatives that utilize the M-PESA platform to facilitate delivery of necessary services. In particular, what is the current role of M-PESA in facilitating access to health services in Kenya and what potential exists for the M-PESA platform to increase access to health care?

IRIS conducted a study which addressed the above issues using inductive methods to gather primarily qualitative information and a limited amount of quantitative data. The study was conducted over two rounds between September-December of 2009 and April-June of 2010 through focus group discussions, case studies, and key informant interviews in Kibera in Nairobi; Murang'a District in Central Province and Kitui District in Eastern Province. Study findings and additional literature related to M-PESA's use in the acquisition of health services are discussed below.

#### HEALTH CARE IN KENYA

As of 2005, 45 percent of Kenyans lived below the national poverty line, and in 2008, nearly 40 percent did not have access to an improved water source, leaving them more vulnerable to disease (WB World Development Indicators). In 2009, per capita expenditure on health was PPP US\$68 of which 46% was borne by the households. A recent survey indicated that 44% of the sick did not seek healthcare due to high costs and 18% due to long distance to the nearest health facility (Allianz Worldwide Care). The life expectancy at birth was 60 years. Lack of adequate medical care begins from birth for many Kenyans. In 2009, only 44 percent of births were attended by a skilled health professional (WHO 2009). With little access to funds to afford preventative care and high incidence of diseases, many Kenyans find themselves in a situation where emergency medical care is necessary but not unaffordable with funds on hand.

### HEALTH SEEKING AND M-PESA-CURRENT PRACTICES AND EMERGING TRENDS

M-PESA is known for its fast, reliable and cost effective way to transfer payments and remittances between persons and businesses across the country. Potentially, therefore, M-PESA can play a crucial role in the health sector through two pathways: (i) to quickly mobilize funds from friends and relatives in order to seek timely health care, and (ii) to facilitate transfer of funds to meet travel costs to the hospital and to pay for the health care.

Many M-PESA users in the study reported that they have used M-PESA to get money for medical procedures and to seek medical consultation on time. M-PESA was frequently cited in focus group discussions and interviews as being used to obtain funds quickly in case of medical emergencies. A case study respondent in Kitui noted that she would request money if one of her children was sick, and that the "greatest advantage of M-PESA is that you can get money instantly to solve problems". The increased speed of payment can have positive effects on the health of the individual as well as potentially reducing the overall costs of treatment. Faster access to care can reduce the total cost of treatment by preventing potential further deterioration of the condition. It can also decrease the amount of time the individual and caregivers spend away from other productive work. Microfinance Opportunities-IRIS' partner on the M-PESA study- found that approximately one-third of hospital bills reported by their financial diaries respondents were paid for with remittances received through M-PESA (Stuart and Cohen, 2011).

Timely health seeking is considered to help strengthen hospitals and medical facilities. Immediate payment for services helps keep costs down and allows the organization to provide better-quality services. For example, hospitals may not release patients until all bills have been paid, incurring additional costs while waiting for the patient to make payment. With M-PESA, it is found that the patient is able to obtain funds faster and the increased speed of payment keeps costs lower for the hospital as well as the patient (Ng'weno, 2010).

Innovative health care providers are utilizing the M-PESA system to increase patient access to health care. For example, the Freedom from Fistula Foundation (FFF) found that one of the major barriers to patients receiving treatment or receiving timely care was the cost of transportation to an appropriate health services provider. Obstetric fistula is a condition caused by internal injuries sustained while giving birth, more often when childbirth is done outside of proper medical assistance. In 2009, the foundation, which operates a fistula unit in Nairobi as well as clinics around the country, began an advertisement campaign to raise awareness of fistula and that it can be treated. When women call in to the foundation, they are asked about their ability to travel to the closest facility. If they do not have the means available, the foundation transfers funds through M-PESA for their transportation costs. This allows more women of lower-income to have access to appropriate medical care, as simply refunding transportation costs on arrival would require the woman to be able to pay the travel expenses upfront. FFF does not advertise the availability of transportation funding; it is only through the screening call that they determine financial need and then M-PESA the

individual the funds. In the first 16 months of the program, the FFF reported that they had not lost any of the transportation money to fraud, and that the use of M-PESA had made it possible for many women to get treatment who otherwise would not have (Bangser, 2011). A similar program is also in operation in Tanzania using M-PESA.

M-PESA is also in use as a means of saving towards health care expenses. A nurse at a local clinic in Kitui stated that she was able to use M-PESA

to pay for a surgery she had in Nairobi because she could save for it on her M-PESA account. More formally, Changamka Microhealth Limited in Kenya offers multiple savings plans which operate in partnership with the M-PESA payment platform. The Maternity Smartcard allows a woman to start saving towards ante-natal, maternity, and post-natal care starting with just 250 Kenya shillings (approximately \$3.12). The price of services is predetermined and known to the smartcard users, and the partnership with M-PESA allows them to add any amount of savings to the card throughout the pregnancy. It is not even necessary for an individual to visit Changamka Microhealth itself to start saving, as the organization has distribution points at other locations including supermarkets and some bank branches.

For the most part, however, the role of M-PESA in health care is not necessarily straight-forward. Interviews with health-care providers indicated that that they did not accept M-PESA as a direct means of payment. While M-PESA users may withdraw money from their accounts (or have someone send money to their account), in most cases they must still withdraw the money in cash and then pay the health center or deposit the money into the hospital's bank account. Therefore, while patients could have used M-PESA to obtain funds for treatment, because the payments were made in cash, it was impossible for the provider to know if the money was received through M-PESA or other means. Thus, while study participants identified M-PESA as helping manage hospital bills, the utility was not usually a direct transaction between the M-PESA user and the clinic. But, while many clinics do not take direct M-PESA payments, many doctors, nurses and administrators felt that people were better able to get money quickly with M-PESA to pay for lab tests and treatments.

#### PATH FORWARD

To date, the use of M-PESA for attaining health services has to date been primarily indirect—users receive funds through M-PESA and cash out the money to pay for services independent from the providers. But, high potential exist to improve access to health care in Kenya through use of the M-PESA platform as more providers integrate it into their methods of service delivery.

The potential is highlighted by the new developments that are aimed at enhancing the functions of M-PESA to provide direct billing services for health seekers and hospitals. Twelve institutions are listed as "Health Management Providers and Hospitals" for M-PESA Pay Bill accounts with Safaricom. This includes organizations such as Population Services International, to insurance companies, to hospitals. There are also a number of organizations categorized as Insurance Agencies which could also be considered to be part of health provision (Safaricom, 2011). A possible improvement to health services could also be achieved through savings products that couple with M-PESA in a way that allows users to deposit small amounts of funds to smart cards with specific purposes, such as medical needs, with a pricing structure that allows the user to deposit small payments frequently without high per-deposit fees. The Changamka Medical Smart Card is one such product. Another possibility would be an option which allows an M-PESA user to set aside a certain percentage or value of incoming funds in a savings account.

It is not uncommon to hear that M-PESA is only useful to people who receive remittances. Low-cost savings products, such as health savings cards, are one way in which the M-PESA platform could bring benefit to low-income Kenyans whether or not they receive any remittances.

#### **REFERENCES**:

Allianz World, 2009, http://www.allianzworldwidecare.com/healthcare-inkenya

Africa Health Workforce Observatory, Human Resources for Health Country Profile: Kenya, 2009, http://www.hrh-observatory.afro.who.int/ images/Document\_Centre/kenya\_country\_profile.pdf

2008-2009 Kenya Demographic and Health Survey Fact Sheet. http:// www.measuredhs.com/pubs/pdf/GF17/GF17.pdf

**Bangser, Maggie.** *Making Mobile Phones Work for Women with Fistula: The M-PESA Experience in Kenya and Tanzania.* Fistula Care at EngenderHealth. 2011

Changamka Microhealth. http://changamka.co.ke/html/aboutus.html 2011.

Kenya Bankers Sacco Society Ltd. M-PESA. http://www.kbsacco.co.ke/ m-pesa.html Accessed: June 2011.

M-PESA Bill Pay Partners. Safaricom. Accessed June, 2011. http:// www.safaricom.co.ke/fileadmin/M-PESA/Documents/Utility\_ Organizations\_11thMay2011.pdf

**Ng'weno, Amolo.** *How Mobile Money Has Changed Lives in Kenya.* Global Savings Forum. Bill & Melinda Gates Foundation. November 2010.

Plyler, Megan G., Sherri Haas and Geetha Nagarajan. *Community-Level Economic Effects of M-PESA in Kenya: Initial Findings*. The IRIS Center, University of Maryland, College Park, June 2010. http://fsassessment.umd. edu/publications.html

**Stuart, Guy and Monique Cohen.** *Cash In, Cash Out Kenya: The Role of M-PESA in the Lives of Low-Income People.* Microfinance Opportunities. September 2011.

World Health Organization. Country Statistics – Kenya. 2009. http://apps. who.int/ghodata/?vid=11500&theme=country

World Bank World Development Indicators. Kenya Country Data. http://data.worldbank.org/country/kenya.

This study is part of the Financial Services Assessment project, undertaken by the IRIS Center at the University of Maryland and its partner, Microfinance Opportunities. The goal is to assess the impact of grants provided by the Bill and Melinda Gates Foundation to microfinance organizations for the development of innovations in financial services.

www.fsassessment.umd.edu



**Ms. Sherri Haas** is a program specialist with the IRIS Center and with five years of experience in technical research, implementation of quantitative and qualitative field research, and project management. She conducted five months of field research in Kenya to gather in-depth information on the community-level effects of M-PESA. She is experienced in all aspects of international development project management and has managed several long term projects. She graduated summa cum laude from Illinois Wesleyan University with research honors in economics as well as a second major in political science.

**Dr. Geetha Nagarajan** is Associate Director at the IRIS Center, serving as Research Director, Economist and Monitoring and Evaluation Specialist. She designed, directed and conducted field research for this study in Kenya for the Financial Services Assessment project. Dr. Nagarajan is a highly experienced researcher, advisory assistance provider, and author of several peer reviewed publications. She has worked in 21 developing countries in Asia, Africa and Eastern Europe. Dr. Nagarajan has evaluated economic development programs, and conducted field based research to identify causes of poverty to design policy and programs to address them, especially in conflict and disaster affected environments. An expert in small and micro and small enterprise development, and rural and microfinance, she has a wide range of experience in developing, measuring, and implementing activities to ensure program effectiveness to reach the target population.

#### FUNDING

Financial Services Assessment is funded by a \$6 million grant from the Bill & Melinda Gates Foundation.

#### **REPORT SERIES**

This report is part of a series that will be generated by the Financial Services Assessment project. The reports are disseminated to a broad audience including microfinance institutions and practitioners, donors, commercial and private-sector partners, policymakers, and researchers.

#### **ADDITIONAL COPIES**

You may download additional copies at www.fsassessment.umd.edu.

#### **CONTACT IRIS**

IRIS Center University of Maryland Department of Economics 3106 Morrill Hall College Park, MD 20742 (USA)

E-mail: info@iris.umd.edu Phone: +1.301.405.3110 Fax: +1.301.405.3020 Web: www.iris.umd.edu

#### CONTACT MICROFINANCE OPPORTUNITIES

1701 K Street, NW Suite 650 Washington, DC 20006 (USA)

E-mail: info@mfopps.org Phone: +1.202.721.0050 Fax: +1.202.721.0010 Web: www.microfinanceopportunities.org





BILL& MELINDA GATES foundation