

# KENYA & TANZANIA



## Making Mobile Phones Work for Women with Fistula: The M-PESA Experience in Kenya and Tanzania

### WHAT IS FISTULA?

Obstetric fistula is a childbirth injury, usually occurring when a woman is in labor too long or when delivery is obstructed, and she has no access to a cesarean section. She endures internal injuries that leave her incontinent, trickling urine and sometimes feces through her vagina.

Fistula Care works to prevent fistula from occurring, treats and cares for women with fistula, and assists in their rehabilitation and reintegration. For more information about fistula and the Fistula Care project, visit [www.fistulacare.org](http://www.fistulacare.org).

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### Background

Mobile phone technology is transforming the lives of millions of women and men in Africa, Asia, and Latin America. People once excluded from vital information are increasingly using cell phones to advance their own well-being and that of their families. This technological revolution is boosting local economies, bringing information to remote corners of the world, and saving lives. Africa is the region with the highest annual growth rate in mobile phone subscribers worldwide,<sup>1</sup> having already reached 300 million subscribers by 2008.<sup>2</sup>

“Mobile banking”—using cell phones to save money, pay bills, and send remittances across countries and continents—is a major piece of this transformation. The cell phone provides a safe and affordable financial instrument for people who are typically excluded from formal financial services. While 12% of Tanzanians have a formal bank account,<sup>3</sup> about half have a mobile phone subscription.<sup>4</sup> In a recent “m-money” survey in Kenya, 42% of respondents without access to a bank, banking cooperative, or savings group said they have used a mobile phone for financial transactions, typically sending or receiving money transfers.<sup>5</sup>

“M-PESA” (“pesa” means “money” in Swahili), which is the mobile banking product of Vodafone, is used by 13 million customers in Kenya and another six million in Tanzania. While several cell phone companies have introduced m-banking, Vodafone dominates the market. The amount of money transferred between phones on Safaricom (Vodafone’s local operator in Kenya) is equivalent to 11% of the country’s gross domestic product.<sup>6</sup> Most of these transactions are tiny, rarely exceeding US\$20.<sup>7</sup> Through M-PESA, coffee growers pay their field workers by text message, farmers submit insurance claims in cases of crop failure, customers pay utility bills, and people buy bus and even movie tickets. Increasingly, innovative programs are enabling isolated people to reach health services, including fistula repair. Mobile banking has become a vehicle to not only strengthen the financial capacity of individuals, but also reduce their isolation and vulnerability.<sup>8</sup>

The M-PESA system is easy to use: The customer goes to an authorized M-PESA agent to register for the service, and his or her cell phone is uploaded with a password-protected account. Once the account is activated, the customer gives cash to the M-PESA agent, who transfers the amount into the customer’s account. From there, the customer uses a cell phone to send the funds to anyone with an M-PESA account. Recipients can pick up cash from any authorized agent, of which there are already 23,000 in Kenya alone.

### Reaching Women, Promoting Health

A technological “lifeline” for many, mobile banking is reaching women in increasingly remote locations. At the same time, the global gender gap still prevents hundreds of millions of women from gaining access to mobile technology. Recognizing the

implications of this gap, the Global System Mobile Association (GSMA) launched the mWomen Program in October 2010. Strongly supported by the U.S. Department of State and the U.S. Agency for International Development (USAID), the program highlights the potential of cell phones to improve women's economic status and health and the well-being of families. Reflecting on the power of cell phones to change lives, U.S. Secretary of State Hillary Clinton remarked: "It is not only a device, it is a door to greater education and information... With a cell phone, a farmer in Sub-Saharan Africa can learn how to protect her crops from pests... a woman in Asia can use her mobile banking to control her family finances... expectant mothers who live nowhere near a clinic can still receive prenatal health tips."<sup>9</sup>

Innovative programs using cell phone technology are growing in number and sophistication. A winner of a USAID contest "Apps 4 Africa" is a program called Mamakiba, a budgeting application that helps low-income pregnant women save and prepay for antenatal care and the costs of delivery. Other newly devised applications include a small portable mobile phone-based ultrasound device to review ultrasound images on the screen of a phone (Mobisante), a microscope device that attaches to a mobile phone to analyze blood or sputum specimens (Cell Scope), and a text-messaging service in the United States providing mothers with information about their pregnancy and newborns (Text4Baby).<sup>9,10,11</sup>

### How Can Mobile Banking Work for Women with Fistula?

A major barrier that women face in accessing health services generally, and particularly fistula repair services, is the cost of transport to a health facility. This problem is compounded by the relative dearth of information about treatment options and the cost of repair, often leaving fistula treatment beyond the physical and financial reach of most women living with the condition.

The Freedom from Fistula Foundation (FFF) in Kenya and Comprehensive Community Based Rehabilitation in Tanzania (CCBRT) have taken great strides in reducing these barriers. Using a combination of mobile banking, public information, and free treatment, they have helped make fistula repair a reality for women who were previously excluded from care.

### Freedom from Fistula Foundation, Kenya

Established in 2008 by Ann Gloag, FFF provides free fistula treatment at Jamaa Mission Hospital (JMH) in Nairobi, facilitates referrals to the permanent fistula unit at Kenyatta National Hospital and to several other hospitals in Kenya, supports occasional fistula clinics ("camps"), and provides equipment for repairs to several hospitals.

There are no official estimates for the prevalence or incidence of fistula in Kenya. However, given high rates of maternal mortality and morbidity there, it became clear to FFF that JMH's services were likely not meeting demand for fistula repair: in the first half of 2009, the average caseload at JMH was only 15 fistula patients per month. To increase the number of women being repaired at JMH, FFF launched a broad public education campaign run in vernacular languages on nine radio stations and created a hotline for people to call for information. Religious institutions were also a key partner in spreading the word about fistula and about the availability of treatment.

Calls came in to the hotline immediately after its launch in July 2009, with more than 40 women being referred to JMH in the first month. People are able



*M-PESA services are widely available across East Africa.*

to call into the hotline for free; the cell phone number is registered on the FFF cell phone, and FFF staff then return the call. (The cost to FFF for returning these calls is approximately US \$110 per month.) The potential patient is screened to ensure that she has a fistula, and the logistics of her trip to Nairobi are arranged. By talking with the woman, FFF ascertains if she needs money for transport, and if she does, FFF sends her funds through M-PESA. An additional amount of 25 Kenyan shillings (US\$0.30) is sent to cover the transaction charges.

Many women calling FFF about fistula do not need money to get to the hospital, but for those who do, the M-PESA service is essential. Approximately 40% of the women who call the hotline use someone else's cell phone rather than their own phone or that of their husband. Typically, these women have less education, have a lower income, live in more remote locations, and have lived with fistula longer. FFF staff are impressed by how these most marginalized women overcome significant socioeconomic barriers to

contact the hotline and get an operation. Calling the capacity to send money through M-PESA “such a transformation,” the Director of FFF, Lucy Mwangi, credits M-PESA with making treatment a reality for many women who otherwise would still be living with fistula.

To ensure that women who have the ability to pay do not exhaust project funds, FFF advertises free fistula repair but does not advertise that transport can also be provided. Only those found to be in need are offered funds for transport. Approximately 20% of women calling the hotline have their own cell phone and are likely to be able to pay to travel to Nairobi; the remaining 40% of women use their husband’s phone or that of a family member and generally pay for transport themselves, pay with help from their husband, or occasionally ask FFF for assistance.

Between July 2009 and November 2010, FFF funded 230 women to get fistula repair and spent US \$2,365 for transport. Money is also sent to women for any follow-up visits they need to make to the hospital after repair. Between January and October 2010, the hotline received nearly 600 calls. There is no evidence of money having been lost to fraud through this system. FFF reports one case of a woman not having used the money sent through M-PESA: She was frightened to have surgery and returned the money to FFF.

### **Comprehensive Community Based Rehabilitation in Tanzania**

CCBRT, one of Tanzania’s leading providers of fistula repair surgery, has developed an initiative to significantly increase the number of fistula repairs it is able to provide. As is the case in Kenya, the incidence and prevalence of fistula in Tanzania are not known, but given the high rates of maternal death and disability and the continuing challenges in providing adequate maternal care,<sup>12</sup> the number of women needing repair is likely to be far greater than the number receiving care across the country.

In 2009, CCBRT, with support from the United Nations Population Fund

(UNFPA) Tanzania Country Office, developed a program to help women overcome two major barriers to treatment: cost of transportation, and lodging at the hospital. An existing building was refurbished to add 20 beds for women awaiting fistula repair. Simultaneously, CCBRT began to pay the transport costs for fistula patients via mobile phones using Vodacom (the Vodafone operator in Tanzania) M-PESA technology.<sup>13</sup> (The fistula repair and accommodations at the hospital are free to the patient.)

Like FFF in Kenya, CCBRT has a cell phone and regularly deposits money into its M-PESA account, but its mechanism for identifying fistula patients is different. CCBRT partners with “ambassadors”—mainly health workers and other individuals throughout Tanzania—who call CCBRT when they have identified a woman with fistula. (Ambassadors also refer people with cleft palate, through separate funding.)

When CCBRT confirms the fistula diagnosis, it transfers to the ambassador the funds to cover the woman’s transportation; the ambassador claims the money from an M-PESA agent, buys a bus ticket, and gives it to the woman. Once the woman arrives, CCBRT transfers an additional 5,000 Tanzanian shillings (US \$3.50) to the ambassador as a gesture of appreciation and an incentive to send more fistula patients for care. Including the incentive, the average one-way cost of transporting a patient to CCBRT is US \$33. As with FFF, CCBRT has had only one case in which money was not used for transport to the hospital—in this case, by an ambassador; that ambassador was dropped from the program.<sup>14</sup>

CCBRT has two hotline numbers to receive calls, which total more than 20 each day. News of the hotline and of CCBRT’s fistula service has been extended through “road trips” made to different locations by a fistula doctor and mobile outreach coordinator; the program has also received a significant boost through being promoted by a leading Tanzanian pop star, Lady Jay Dee.

Between January and November 2010, 54 ambassadors referred 120 women

for fistula repair. The influx of patients through the M-PESA program marked a 60% increase over the previous year, a trend that CCBRT hopes to see continue. In addition, CCBRT and Government of Tanzania have entered a public-private partnership to build Baobab Maternity Hospital. Located in Dar es Salaam, the hospital will provide high quality maternal and neonatal health services and build capacity in hospital management and service delivery in the peripheral health system in Dar es Salaam region.

### **Moving Forward**

Making m-money work for women with fistula requires increasing access to cell phone technology among the most marginalized women. In Tanzania, 70% of people who have used m-money already have access to formal banking services; only about 18% are “unbanked.” (The remaining people had access to informal savings and borrowing services in the past year.)<sup>15</sup> The Bill & Melinda Gates Foundation recently awarded a grant of US \$4.8 million to Vodacom to extend services in Tanzania to reach the “unbanked” community, signaling the donor community’s interest in reaching the most underserved with m-money. The mWomen program of GSMA, with the support of USAID and the U.S. Department of State, is exploring new ways to promote women’s health using this burgeoning technology.

Expanding information campaigns, particularly through radio, to advertise fistula hotlines and the M-PESA facility could increase awareness of these services. FFF is now establishing a permanent fistula unit at Moi Teaching and Referral Hospital in Eldoret, Kenya. In addition, FFF is establishing a fistula unit at Bwaila Maternity Hospital in Lilongwe, Malawi; radio announcements will announce services there and a hotline will be set up to receive calls (M-PESA does not yet operate in Malawi). Establishing formal linkages among hospitals conducting fistula services within a country could enable hotlines to refer women to the closest fistula hospital providing care, even if it is not the hospital receiving the call.

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## KENYA

Bisected by the equator, Kenya is a physically diverse country with strong regional differences. Although most women in Kenya attend antenatal care, only 44% of births benefit from the assistance of a trained health professional such as a nurse or midwife.<sup>16</sup>

## TANZANIA

More than half of Tanzania's women give birth before the age of 20, and 47% of births take place at a health facility. Fertility varies significantly between urban and rural areas: rural women have an average of three children more than their urban counterparts.<sup>17</sup>

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Since for both logistical and personal reasons many women with fistula prefer to go to the nearest facility, this partnering of referral systems and M-PESA transfers could ease the logistical burden for women while reducing transport costs to the health programs. In the longer run, as fistula referral systems grow in size and efficiency, it may be possible to expand the range of ambassadors to include community leaders, teachers, and others. Mobile banking for women with fistula may show the way for the cell phone industry overall, and mobile health applications in particular, to reach the most vulnerable women, transforming health and transforming lives.

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