



World Vision

malaria  
consortium  
disease control, better health

# Republic of Mozambique Ministry of Health National Malaria Control Program

## Mobile-Money for mass LLINs distributions: lessons learned from Mozambique

Bambo, F

07.01.17



# Content

- Context
- Money Challenge
- Electronic Payment Platform
- Debate among partners
- The baptism of Fire
- Bad weather warning
- The Good News
- Recommendations and Mapping for Mpesa

# Nampula Province



- **Districts:** 23
- **Area:** 79,010Km<sup>2</sup>
- **Population:** 5,130,036
- **Households:** 1,282,509
- **Malaria prevalence:**  
66% U5 (IMASIDA 2015)

# Context: Universal Mass LLIN distribution

- **Nampula province's scale of LLIN distribution:**

- Target: 2.8 million LLINs
- Cost: \$3.8 million
- Timing: November 2016

Nampula province was chosen to pilot trial mass LLIN distribution strategy, at scale (2016)

- **Project:**

- GFATM NFM: **Accelerating and Strengthening Malaria control in Mozambique**  
**MOZ-M-WV [736]**
- PR: MoH and WVI
- SR: Malaria Consortium, Food for the Hungry (FH) and Foundation for Community Development (FDC)

Lessons learned to refine new strategy before nation-wide scale up to distribute about 13 million LLINs for universal coverage (2017)

# The Money challenge (1)

- The mass distribution requires payment in cash of thousands of actors at the community level
- The transportation of large amounts of cash poses substantial risks and makes financial control and accountability challenging

Number of Registrars	Cost
9,161	\$ 217,380

# The Money challenge: mobile cell and banks coverage

Bens Duráveis	Total		Urbano		Rural	
	2008/9	2014/15	2008/9	2014/15	2008/9	2014/15
Telefone celular	23,5	55,8	53,0	78,8	11,4	45,6

Source: IOF 2014/2015



Less than 10% of rural Mozambique inhabitants with access to banks

# Why use an Electronic Payment Platform?

- Mobile-money payments offer a quick, secure and convenient alternative to cash payments; large amounts of payments can be made to multiple recipients via a single electronic platform
- With Mobile-Money: the money is sent directly to beneficiary's mobile phone number via an integrated electronic banking platform
- The beneficiary can then exchange the e-payment for cash at a variety of agents most of which are corner shops, petrol stations, chemists, mobile phone dealers and other retail outlets.

Malaria Consortium, in coordination with World Vision and NMCP, opted to use a mobile payment platform to transfer payments, otherwise done in cash: M-Pesa (Vodacom) was chosen, as it is the most developed and popular mobile-money platform in the country

# A hot debate among partners about Mpesa

- **The “pros” of Mpesa – GFATM, WV, MC, NMCP**
  - Let’s trial, document lessons and produce evidence for informed decision making on the payment strategy to be used for the 2017 scale up
- **The “cons” of Mpesa– Provincial Health Directorate**
- Vodacom’s Mpesa is not a good fit for Nampula Province because:
  - Insufficient coverage of Vodacom (compared to other mobile phone operators)
  - Access to mobile phone: a significant proportion of the population does not have a mobile phone
  - Access to Mpesa agents: mostly located in the main town of districts, meaning that community-level actors need to travel from their village to the capital town to retrieve money (involves personal costs)




# The baptism of fire (1)

## Step 1- Creating a data base with beneficiaries' data :

- Beneficiary name
- Does the beneficiary have a cellular phone?
- If not, has an interest in buying a low-cost cell phone with SIM card?
- Is interested in using Mpesa Service?

- Group 1: **Mpesa Payment**
- To beneficiaries with cell phone numbers, regardless of the mobile network (platform has no restriction)

- Group 2: **Payment in cash**
- To beneficiaries who do not have a cell phone number



**Challenge 1:** District health authorities did not provide beneficiary data; instead, we used Attendance Sheets which included beneficiaries mobile phone number.

Beneficiaries were divided into 2 groups



# The baptism of fire (2)

## Step 2- Paying beneficiaries

- We started processing Mpesa payments in 3 districts
- When the first 3 districts confirmed receipt of subsidies, we encouraged other districts to send beneficiaries' lists with cell phone numbers
- In total 2,433 payments were completed, for a total amount of \$ 71,534
- In the following weeks Mpesa payments continued throughout the following along the various phases of the campaign

## • Challenge 2

- Districts lacked confidence in the platform and requested that payments be made in cash

## • Challenge 3

- Errors were made when entering mobile number resulting in payment errors

# Bad weather warning... a few other challenges and Problem Solving

- Some beneficiaries deleted the SMS message (money receipt confirmation) sent by Mpesa, assuming that its was an advertisement from the mobile company
  - PS: DHA collect the list of the beneficiaries' with this problem and cross check with Mpesa to confirm.
- Some beneficiaries use friend/relative/neighbour's mobile number, and thus did not have access to the mobile phone when notification was received via (SMS) and thus could not retrieve payment on time
- Beneficiaries did not withdraw payments within 7 days, resulting in payments being returned to Malaria Consortium
  - PS: Cross check with Mpesa and new transference; or Cash on hand
- Some beneficiaries claimed that they did not receive the amounts, despite Mpesa's proof of payment

# The good news!

## Security

- Transporting large volumes of cash over long distances can make staff and payees vulnerable to theft or other safety issues
- The use of mobile payment system directly addressed this issue, by reducing the need for individuals to handle or transport cash

## Cost Saving

- Transportation expenses and staff time required to disburse cash payments is costly
- Shifting payments to mobile-money reduced the cost related to payments in cash by at least a third ( \$ 71,534/ \$ 217,380)

## Transparency

- Payments in Cash payments are highly vulnerable to misuse and corruption
- The mobile payment system allowed financial flows to be more accurately monitored using the Mpesa system has resulted in improved transparency and reduced the risk of theft.

## Acceptability

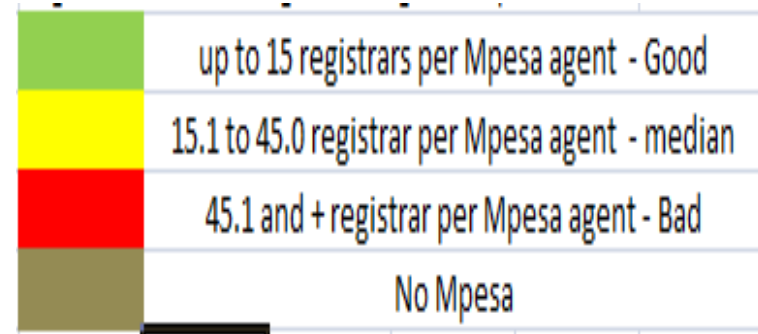
- PHA changed previous skeptic position due to Eletronic Payment Platform
- PHA admitted the possibility of use Mpesa payment for other health campaigns

# Recommendations for managing payment using mobile platform

- Increase District Health Officers' understanding of how mobile-money works to build trust, by highlighting the benefits in reducing risks associated with transporting large amounts of cash
- Teams on the ground must better inform beneficiaries on the payment process to avoid the deletion of SMS payment notifications
- The collection and digitalization of contact information and management of the beneficiaries' database should be improved in order to reduce the risk of errors in payments, such as sending a test SMS in advance of the transfer
- Incorporate Mpesa in "Standard Budget": i) HHR list digitizer; ii) Mpesa operator

# New Mpesa Mapping and Payment Plan

- The majority of Mpesa benefits is on HHR phase
- Stratification of Mpesa payment
  - # of agents
  - # of Registrars/Enumerators
  - Ratio Registrar /Mpesa agent
- Banks Mapping
- Distance from districts without Bank



	up to 15 registrars per Mpesa agent - Good
	15.1 to 45.0 registrar per Mpesa agent - median
	45.1 and + registrar per Mpesa agent - Bad
	No Mpesa

# Payment mapping plan

Província da Zambézia		Registadores Previstos	Distrito tem Mpesa?		No de agentes Mpesa	Rácio registador /agente mpesa	Boa cobertura de Mpesa?		Distrito tem Banco?		Se Não tem, qual o distrito mais próximo com banco?	Distância em Km/milhas	Valores aproximados envolvidos no registo
1	Quelimane	703	1		372	1.9	X		1				984,200
2	Alto Molocué	720	1		48	15.0	X		1				1,008,000
3	Chinde	174		1	0	0		X		1	Mopeia	120	243,600
4	Derre	168		1	0	0		X		1	Morrumbala	90	235,200
16	Mopeia	296	1		8	37.0	X		1				414,400
17	Morrumbala	663	1		24	27.6	X		1				928,200
20	Namarroí	271	1		3	90.33		X		1	Gurue	145	379,400

NEVER EVER GIVE UP !



Obrigado