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# Output-based approach (OBA) in Uganda healthcare

- Steward: Uganda Ministry of Health
- Donors:
  - Global Partnership on Output-Based Aid (GPOBA, World Bank)
  - German Development Bank (KFW)
- Program Management: Marie Stopes International Uganda (MSIU)
- Providers: contracted clinics and hospitals

# Service flow



claim forms

## Health Service Providers

- Goal: Change health-seeking behavior
- Purchase Vouchers @ 3000 UGX from independent distributors (e.g. pharmacies, community workers)
- Qualified low-income mothers

Clients: Mothers and Patients

- Provide treatment in exchange for vouchers
- Submit claims forms to OBA Management Agency
- About 100 providers as of April 2010

- Reviews claims (Fraud detection)
- Reimburses existing service providers for services rendered
- Payments made by electronic funds transfer

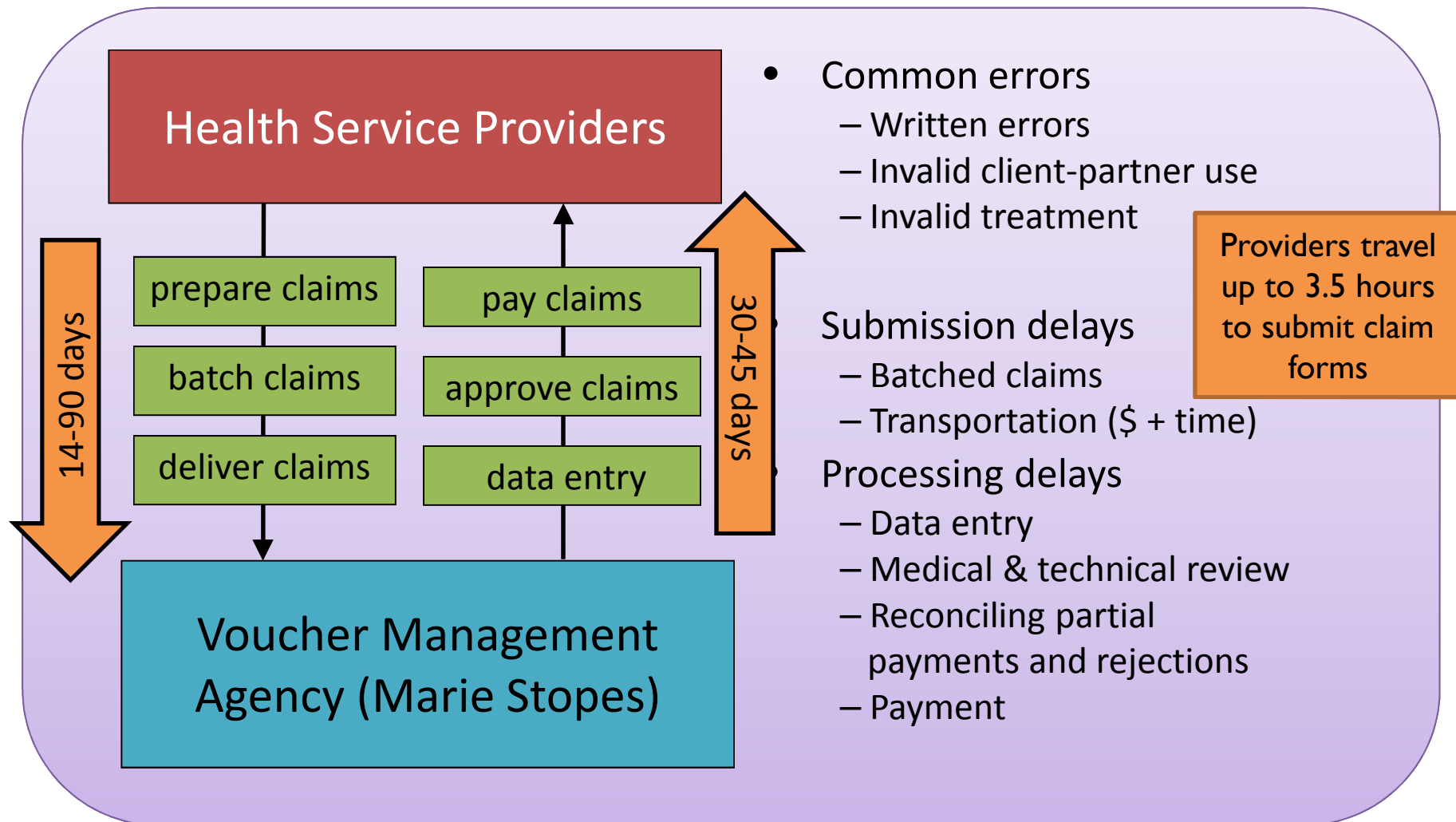
Voucher Management Agency

vouchers



program management is communications intensive!

# Claims Submission Processing



# Information Constraints

FORM DETAILS			ACCEPTED CLAIMS		
CLAIM DATE	SL. NO	FORM NO	EXPECTED AMT.	FULLY PAID AMT.	ADJUSTED AMT.
Second Half of August 2008					
29/Aug/2008	1	10786	6,920	6,920	
29/Aug/2008	14	10800	9,400		4,400
29/Aug/2008	15	19101	19,200	19,200	
29/Aug/2008	16	19102	8,000	8,000	
29/Aug/2008	17	19103	13,700		
29/Aug/2008	18	19105	19,200	19,200	

Providers often have questions about claim summary reports

4/12 didn't know how many claims have been rejected

4/12 have computer training

3/12 had not gotten feedback

12/12 own a mobile phone

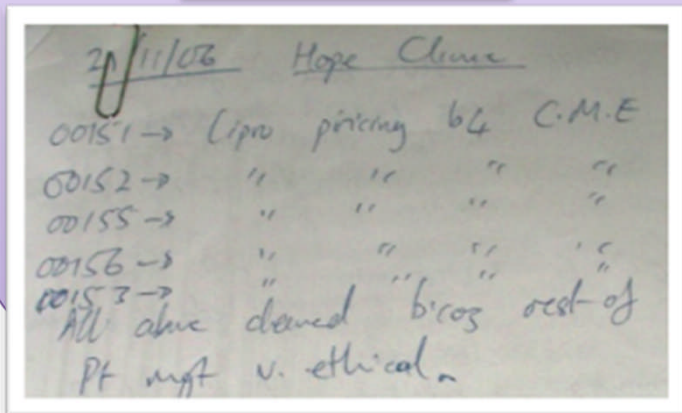
## Obscure and Infrequent Feedback

*"I don't know. I don't know how we are performing. I don't know how we are faring... and of course it takes a lot of time."*

## Sequential Rejections

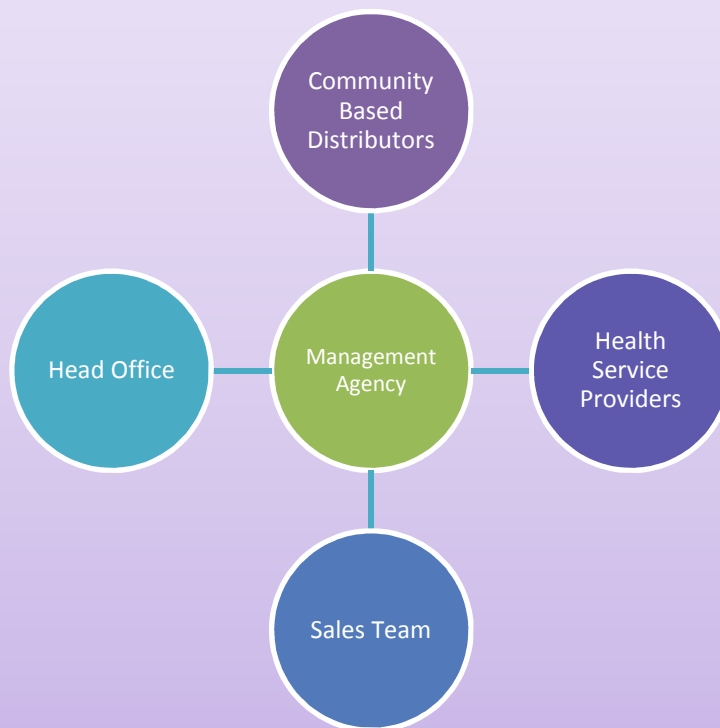
*"Cipro pricing b4 C[ontinuing] M[edical] E[ducation]... All above denied b'cos rest of P[atien]t mgt n[ot]. ethical"*

Often an entire month's worth of claims might be rejected at once for the same error

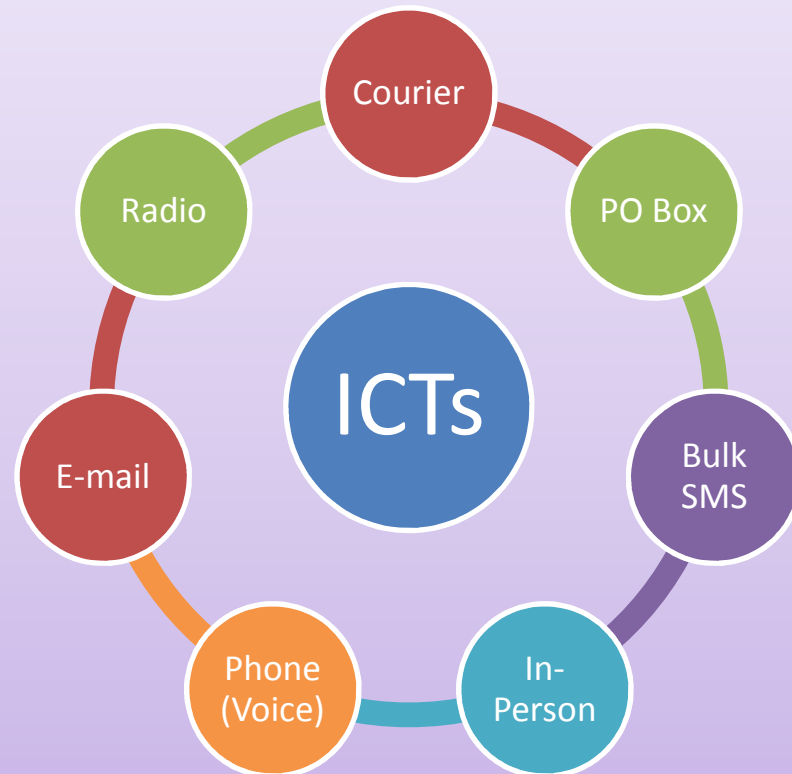


# Communications is key

## Linking Stakeholders



## Communications Media

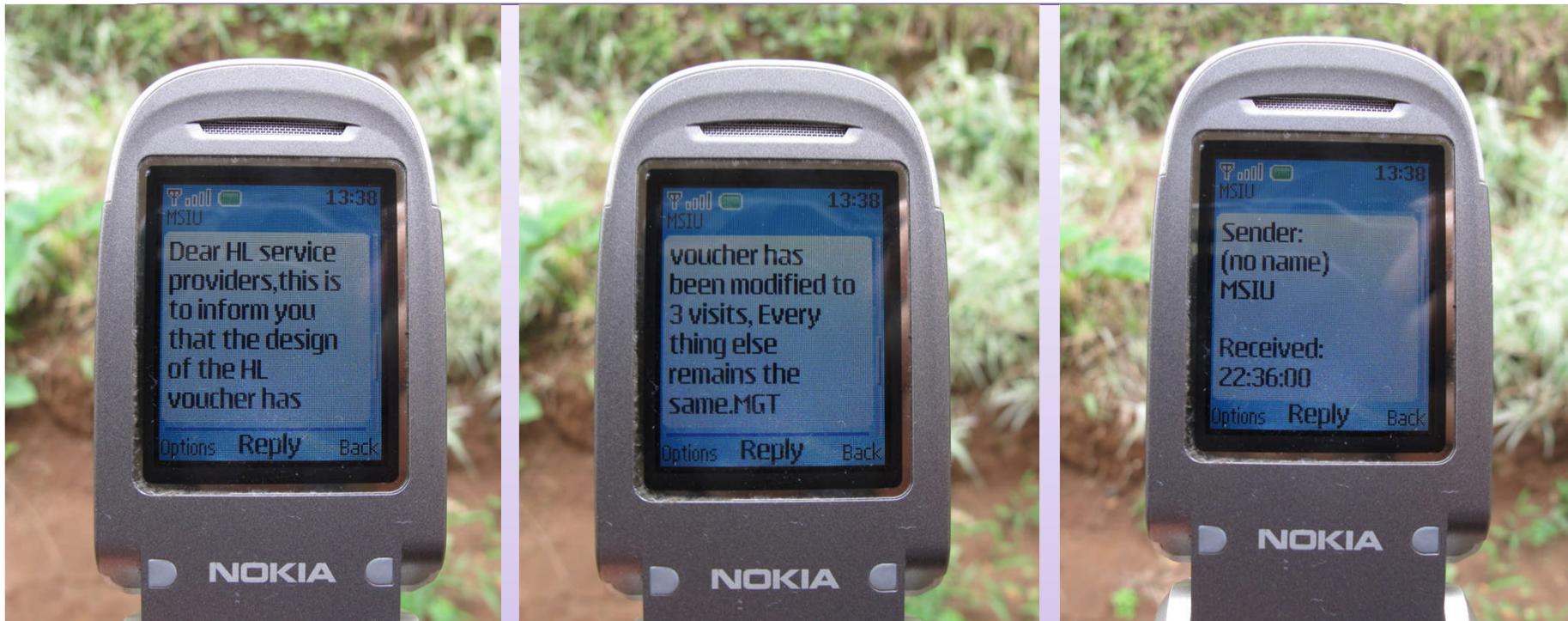


# 59 providers from initial rollout of maternal voucher “HealthyLife”

**Paper  
vs.  
E-mail  
vs.  
SMS**

Topic	Question	Result
<b>Mobile Phones</b>	Average Airtime	20,000 UGX
	Spending	(10 USD)
	Internet Use	12/59 (20.3%)
	SMS Sent/week	8.84 (mean)
	Mobiles Owned	1.49 (mean)
	Mobile SIMS Owned	1.93 (mean)
	<b>Computers</b>	Available in Facility
<b>Internet Usage</b>	Distance	15.8.km (mean)
	Freq of Use:	
	- Every Day	8/59 (13.6%)
	- Weekly	13/59 (22.0%)
	- Monthly	18/59 (30.5%)
- None	20/59 (33.9%)	

# Bulk SMS: Enabling Broadcast Announcements



150 characters

Addressed from MSIU  
(on dominant carrier)

Template Support

Two-Way  
Communication

SMS Forwarding

Group Addressing

Automatic Archiving  
of Messages



Beyonic M+ :: Hosted SMS and MMS Services - Microsoft Internet Explorer

File Edit View Favorites Tools Help

Address <http://mplus.beyonic.com/?l=1>

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# Beyonic M+

Hosted SMS and MMS Services

Home

Welcome to Beyonic M+, your home for Hosted SMS and MMS Services.

With a Beyonic M+ hosted account, you can:

-  **Send Bulk SMS & MMS**  
From your browser or from your phone using sms! [Learn More](#)
-  **Create & Manage Keyword & Subscription Based SMS & MMS Content Services**  
Instantly start offering SMS & MMS services of all kinds with the service creation wizard. [Learn More](#)
-  **Connect your M+ hosted account to numerous gateways worldwide**  
If you already have an MMS/SMS gateway account with your own short/long codes, we'll connect them to your M+ account!
-  **Beyonic M+ Standalone**  
Beyonic M+ is also available in a standalone enterprise version for purchase and install on your own servers. [Click HERE for more!](#)

Links: [Full M+ Features List](#) | [M+ Pricing](#) | [M+ Standalone](#)

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News (2)

Recent News  
New Feature: Send Bulk SMS from your mobile phone  
Beyonic M+ Launched

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start Beyonic M+ :: Hosted... SMS system print scr... Internet 10:24 AM

User login is from the homepage of the SMS host provider

M+ Control Center - Messages::View - Microsoft Internet Explorer

File Edit View Favorites Tools Help

Address <http://app.mplus.beyonic.com/messages/view?restoreCurrentPage=1&activeTabMsgControllerView=1>

To help protect your security, Internet Explorer stopped this site from installing an ActiveX control on your computer. Click here for options...

Received All Sent Bulk Sms Subscrip. Sms Defective Blacklisted

Archive of sent and received messages with contact details, date, message content and delivery status.

..Click Here to Print

Page 1 of 101 View 1 - 11 of 3 026

	SMSC	Short Code	Sent Date	Message	Advisory Charge	Number of Recipients	Recipient(s)	Status	Delivery Status
1			2010-03-17 09:03:01	MSIU has sent you an email on ...[+]	1		+256772	ProcessedOk on 2010-03-17 09:03:10	[2010-03-17 09:05:46] 17:SysAccepted [2010-03-17 09:05:46] 8:DeliveredToSr [2010-03-17 09:05:47] 1:DeliveredToPh
2			2010-03-17 09:03:01	MSIU has sent you an email on revision of service delivery costs. Please retrieve email and confirm receipt. Thank you[-]	1		+256772	ProcessedOk on 2010-03-17 09:03:10	[2010-03-17 09:05:46] 17:SysAccepted [2010-03-17 09:05:47] 8:DeliveredToSr
3			2010-03-17 09:03:01	MSIU has sent you an email on revision of service delivery costs. Please retrieve email and confirm receipt. Thank you[-]	1		+256772	ProcessedOk on 2010-03-17 09:03:10	[2010-03-17 09:05:48] 17:SysAccepted [2010-03-17 09:05:48] 8:DeliveredToSr [2010-03-17 09:05:58] 1:DeliveredToPh

Done Internet

start M+ Control Center - ... SMS system print scr... 10:46 AM

M+ Control Center - Services::Bulk - Microsoft Internet Explorer

File Edit View Favorites Tools Help

Back Forward Stop Refresh Home Search Favorites RSS Mail Print Copy Paste

Address <http://app.mplus.beyonic.com/services/bulk> Go Links

Search N/A YouTube Games Email Twitter eBay Widgets

To help protect your security, Internet Explorer stopped this site from installing an ActiveX control on your computer. Click here for options...

**SMS Credit Info:**

Remaining:3948  
Total Used:2939

**From:**

Note: Sender ID is not supported on all networks. Set blank to ignore.

**Sms Template:**  [add SMS template](#)

**Message:**

**Text**

150 Characters left

**Phone Nos:** Enter One Phone Number Per Line

[Show Advanced Options \[+\]](#)

Done Internet

start M+ Control Center - ... SMS system print scr... 10:51 AM

M+ Control Center - Services::Bulk - Microsoft Internet Explorer

File Edit View Favorites Tools Help

Address <http://app.mplus.beyonic.com/services/bulk>

To help protect your security, Internet Explorer stopped this site from installing an ActiveX control on your computer. Click here for options...

150 Characters left

**Phone Nos:** Enter One Phone Number Per Line

[Hide Advanced Options \[-\]](#)

Excel File Import: [Show Import Options \[+\]](#)

Contacts: [Select Contacts \[+\]](#)

Groups: [Select Groups \[+\]](#)

Subscribers to: [Select Subscriber Services \[+\]](#)

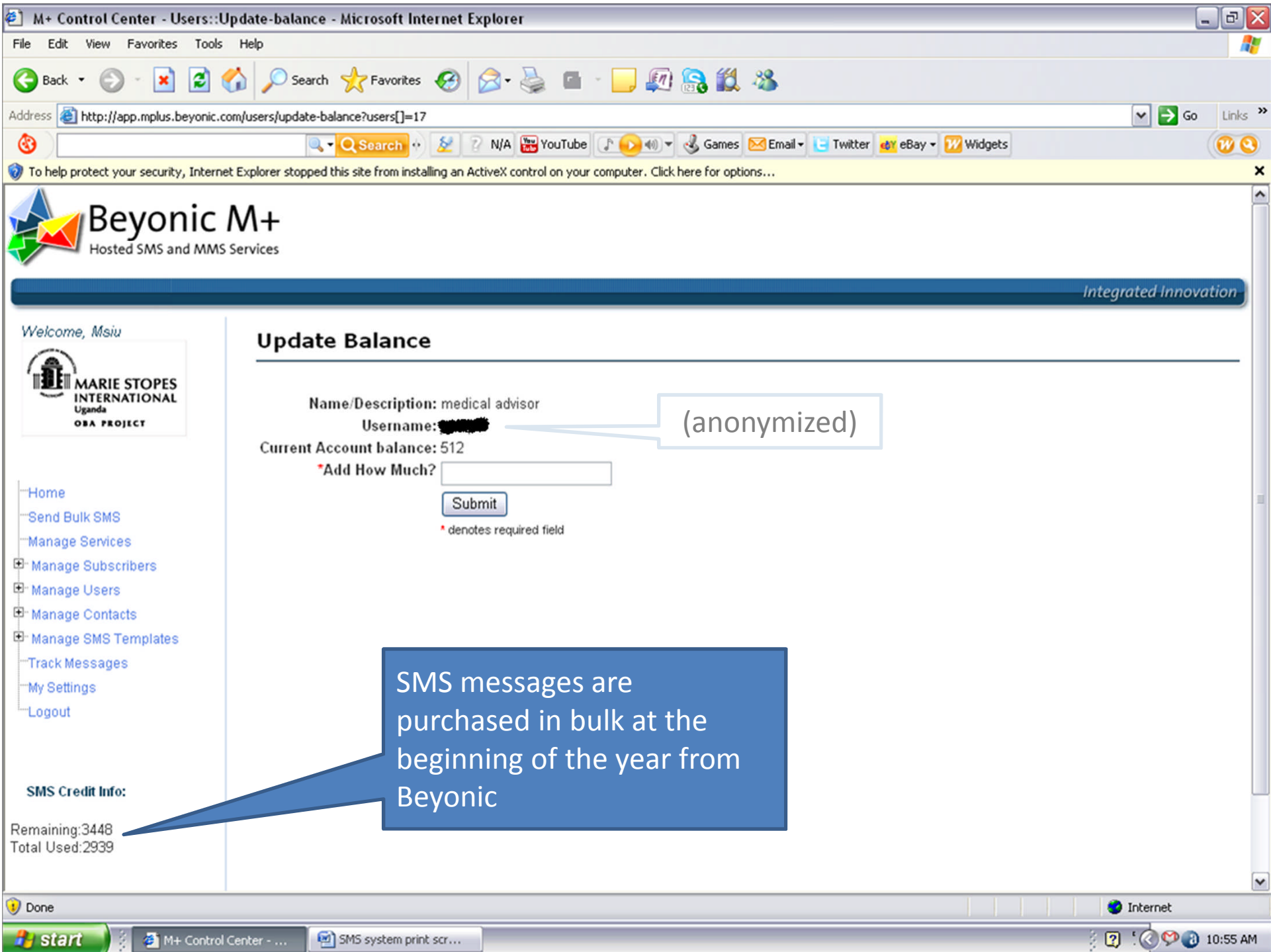
Users of: [Select User Services \[+\]](#)

Contact Email:  Don't Send a Copy to Contact Email  
 Send a Copy to Contact's Email(s) If Available

Send When?  Now  
 On [ ] at [00][00] HRS  
 Every [Array] [Hour(s)] From: [ ] [00][00] HRS, To: [ ] [00][00] HRS

[Contact Us](#) | Copyright (c) 2008 Beyonic LTD

start M+ Control Center - ... SMS system print scr... UNSOLD RANGES-SO... 11:11 AM



**Beyonic M+**  
Hosted SMS and MMS Services

Integrated Innovation

Welcome, Msiu



## Update Balance

Name/Description: medical advisor

Username: [REDACTED]

(anonymized)

Current Account balance: 512

\*Add How Much?

Submit

\* denotes required field

- Home
- Send Bulk SMS
- Manage Services
- Manage Subscribers
- Manage Users
- Manage Contacts
- Manage SMS Templates
- Track Messages
- My Settings
- Logout

### SMS Credit Info:

Remaining:3448  
Total Used:2939

SMS messages are purchased in bulk at the beginning of the year from Beyonic

M+ Control Center - Contacts::View - Microsoft Internet Explorer

File Edit View Favorites Tools Help

Address <http://app.mplus.beyonic.com/contacts/view>

To help protect your security, Internet Explorer stopped this site from installing an ActiveX control on your computer. Click here for options...

My Contacts My Groups

Search [+]

..Click Here to Print

View 1 - 30 of 105

	Select	Name	Phone	Email	Options
1	<input type="checkbox"/>	[REDACTED]	+2567823 [REDACTED]		Edit   Delete   Send Sms
2	<input type="checkbox"/>	[REDACTED]	+2567011 [REDACTED]		Edit   Delete   Send Sms
3	<input type="checkbox"/>	[REDACTED]	+2567721 [REDACTED]		Edit   Delete   Send Sms
4	<input type="checkbox"/>	[REDACTED]	+2567143 [REDACTED]		Edit   Delete   Send Sms
5	<input type="checkbox"/>	[REDACTED]	+2567821 [REDACTED]		Edit   Delete   Send Sms
6	<input type="checkbox"/>	[REDACTED]	+2567822 [REDACTED]		Edit   Delete   Send Sms
7	<input type="checkbox"/>	[REDACTED]	+2567725 [REDACTED]		Edit   Delete   Send Sms
8	<input type="checkbox"/>	[REDACTED]	+2567122 [REDACTED]		Edit   Delete   Send Sms
9	<input type="checkbox"/>	[REDACTED]	+25677252 [REDACTED]		Edit   Delete   Send Sms
10	<input type="checkbox"/>	[REDACTED]	+2567526 [REDACTED]		Edit   Delete   Send Sms
11	<input type="checkbox"/>	[REDACTED]	+256775 [REDACTED]		Edit   Delete   Send Sms
12	<input type="checkbox"/>	[REDACTED] Clinic	+256782 [REDACTED]		Edit   Delete   Send Sms
13	<input type="checkbox"/>	[REDACTED]	+256772 [REDACTED]		Edit   Delete   Send Sms
14	<input type="checkbox"/>	[REDACTED]	+256772 [REDACTED]		Edit   Delete   Send Sms
15	<input type="checkbox"/>	[REDACTED]	+2567524 [REDACTED]		Edit   Delete   Send Sms
16	<input type="checkbox"/>	[REDACTED]	+256775 [REDACTED]		Edit   Delete   Send Sms
17	<input type="checkbox"/>	[REDACTED]	+256772 [REDACTED]		Edit   Delete   Send Sms
18	<input type="checkbox"/>	[REDACTED] Med	+256716 [REDACTED]		Edit   Delete   Send Sms
19	<input type="checkbox"/>	[REDACTED] Med-2	+25677 [REDACTED]		Edit   Delete   Send Sms

start | M+ Control Center - ... | SMS system print scr... | 10:58 AM



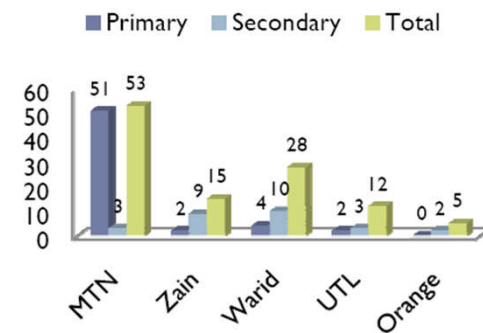




# Technical Difficulties

- Carrier Dependence
  - SMS service is on dominant carrier (Zain)
  - Health service providers on other carriers report that they failed to receive SMS messages
- Phone Number management
  - Wrong numbers
  - Changed numbers
  - Multiple numbers
  - Swapped/shifted numbers in spreadsheet
- Un-received Texts
  - Health service providers in low coverage areas
  - Health service providers without electricity (phones powered off)
- Duplicate and Delayed Texts

HSP Mobile Provider Usage



# Next steps

- Stronger database management procedures
  - Clean phone numbers
- Focus on managing contacts and contact groups
  - Email reminders to providers to update their contact information quarterly
  - Ask providers to alert Marie Stopes when messages are misdirected
- Consider expanding SMS database to voucher clients
- Develop M&E applications with short questionnaires for client satisfaction, provider assessment, distributor feedback

# Acknowledgments

- Uganda Ministry of Health
- Marie Stopes International – Uganda
- German Development Bank (KfW)
- Global Partnership on Output-based Aid
- Blum Center for Developing Economies