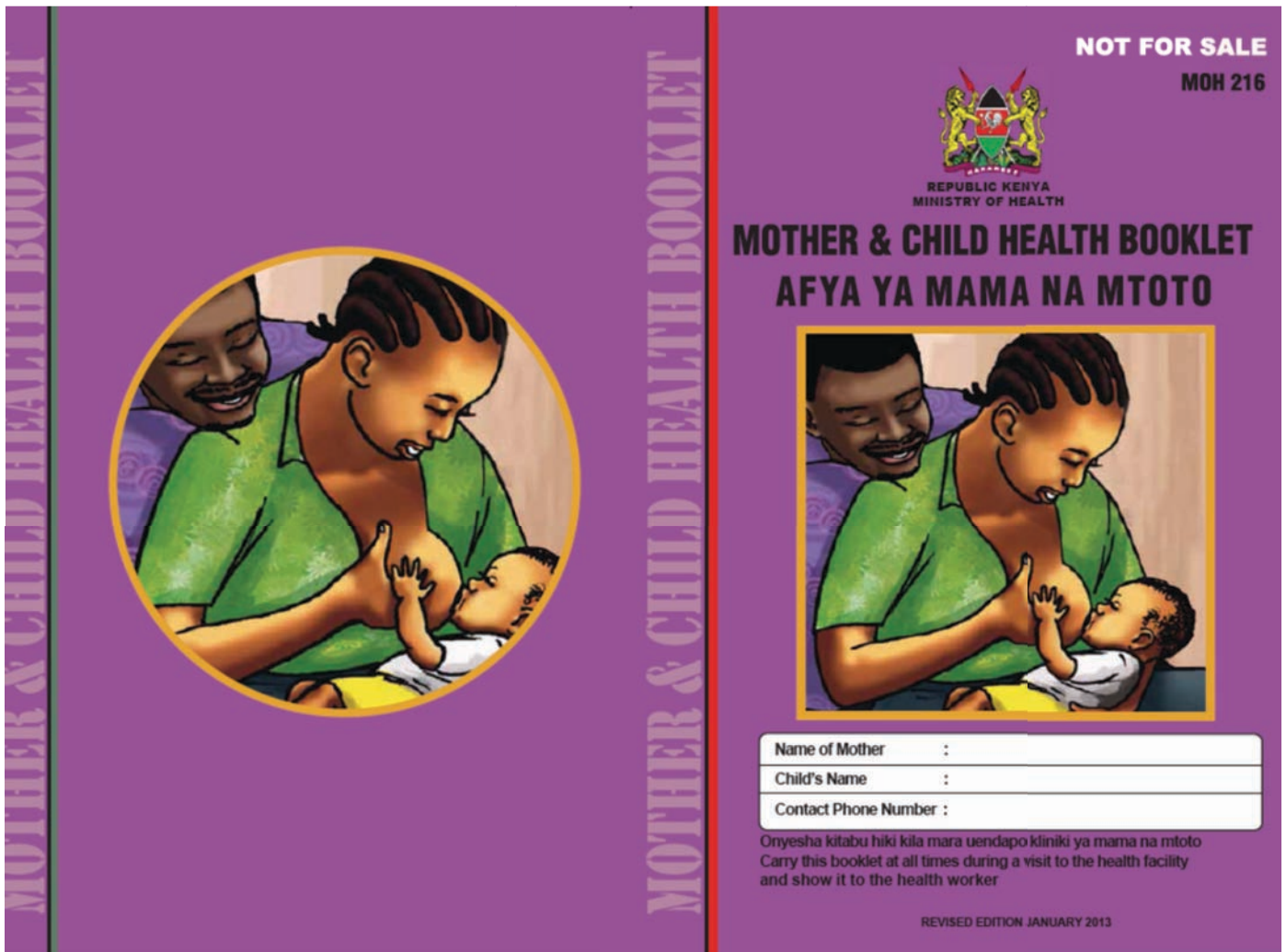


# Maternal & Child Health Electronic Medical Record



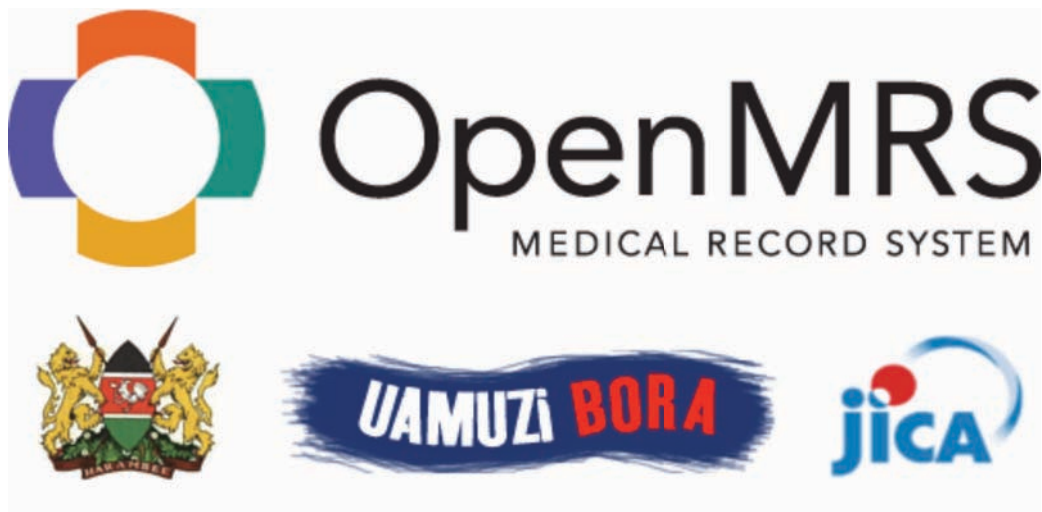


# MCH EMR

- Based on MOH216
- April to June pilot
- 1,000 patients registered
- Feasibility of implementation & scale-up

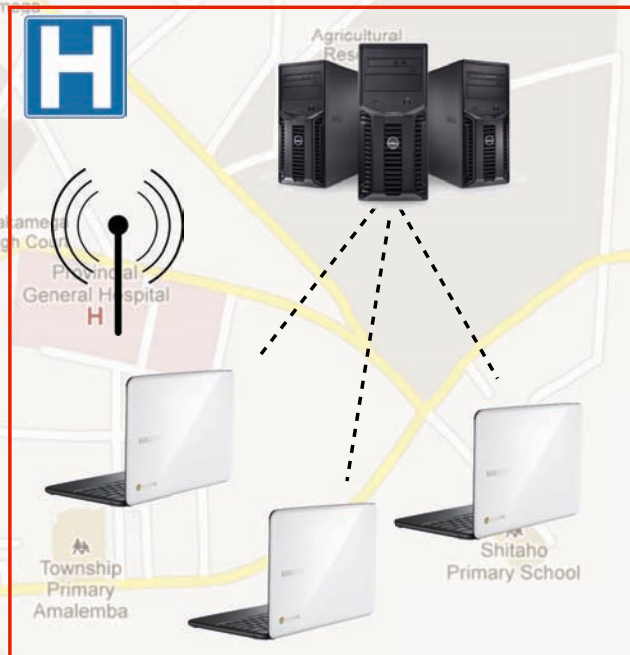


# Our model



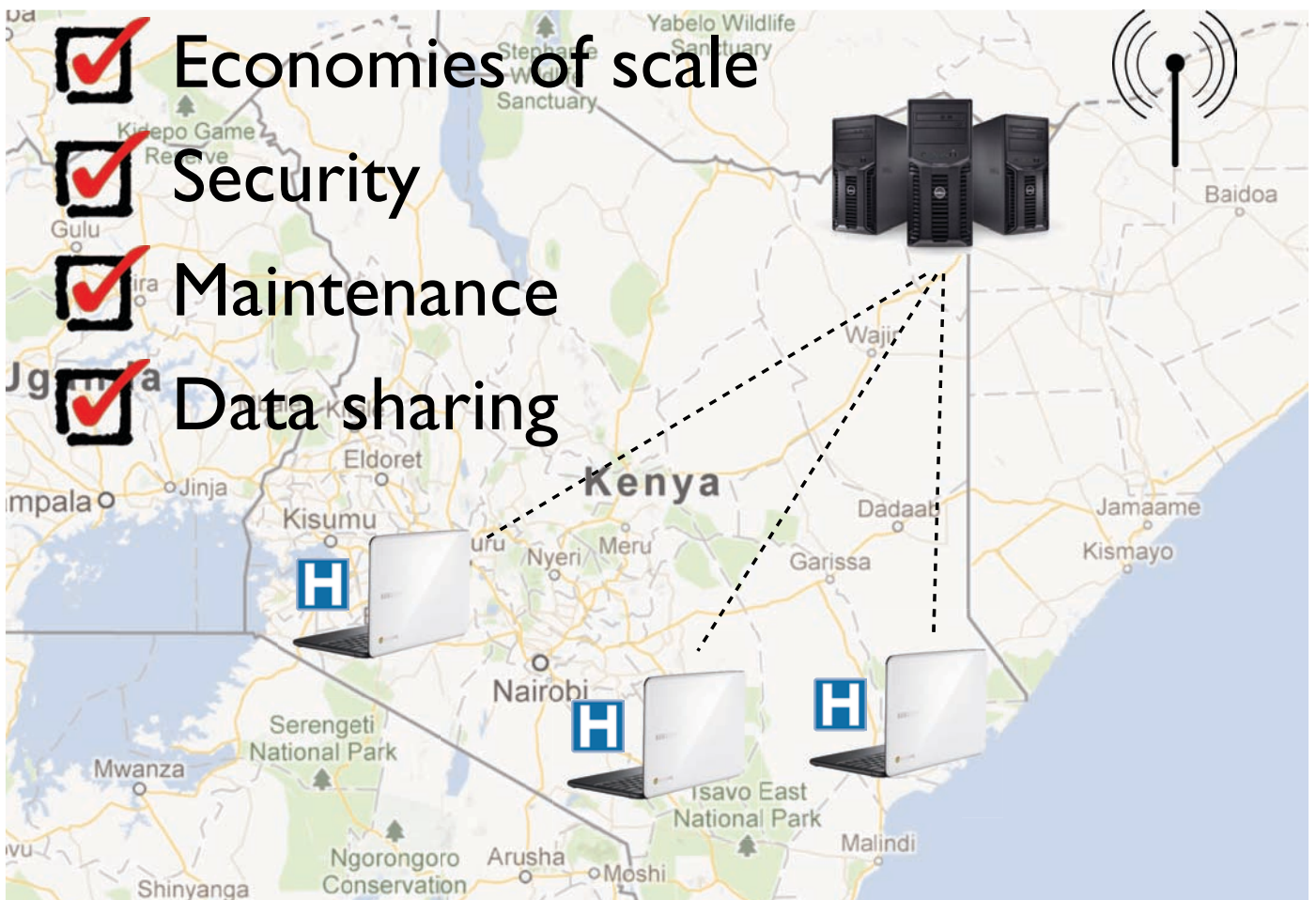
## A local clinic model

- Expense
- Security
- Maintenance
- Sharing data



## Our model

- ☒ Economies of scale
- ☒ Security
- ☒ Maintenance
- ☒ Data sharing





# Our model



ALL patient identifiers removed



- ☒ Indicator dashboard
- ☒ Online, Real-time
- ☒ Data sharing
- ☒ Decision making



# Our work

## (6) Indicator Dashboard

(1) Data entry

(2) Data verification

(3) Clinical reminders

(4) Follow Up

(5) Performance management

(2) Data verification

[Overview](#)
[Regimens](#)
[Encounters](#)
[Demographics](#)
[Graphs](#)

### Patient Flags

Missing First Clinic Visit  
Missing Maternal Profile

### Patient Actions

[Exit Patient from Care](#)

### Programs

Program	Enrollment Date	Location
<a href="#">Enrolled in MCH Clinic</a>	28-Mar-2013	
<a href="#">Add a new program</a>		

### Relationships

None

[Add a new relationship](#)

## MCH Verification

**Start date:** 02/04/2013

**End date:** 12/04/2013

**Location:**

A1	Missing Program Enrolment Date	0
A2	Missing Program Enrolment Location	0
A3	Missing Maternal Profile	7
A4	Missing First Clinic Visit (Maternal)	9
A5	Missing Clinic Visit (>3 months)	3
A6	Missing Child Profile	10
A7	Missing First Clinic Visit (Child)	25
C1	Danger Sign: Vaginal Bleeding	0
C2	Danger Sign: Fits	0
C3	Danger sign: Severe Abdominal Pain	0
C4	Danger Sign: Severe Headache	0
C5	Danger Sign: Very Pale	0
C6	Danger Sign: Fever	0
C7	Danger Sign: No or Reduced Foetal Movements	0
C8	Maternal HIV Status	12



## MCH Verification


Start date: 02/04/2013  
End date: 12/04/2013  
Location:

### A3: Missing Maternal Profile (7 Patients)

patientId	givenName	familyName
116		
117		
120		
121		
207		
212		
308		

Viewing 1 - 7 of 7



 22 yrs (~ 01-Jan-1991)

BMI: ? ( Weight: 67.0 kg , Height: )

Last encounter: Return Visit @

Overview

Regimens

Encounters

Demographics

Graphs

#### Patient Flags

Missing First Clinic Visit  
Missing Maternal Profile

#### Patient Actions

Exit Patient from Care

#### Programs

Program	Enrollment Date	Location
<a href="#">Enrolled in MCH Clinic</a>	28-Mar-2013	
<a href="#">Add a new program</a>		

#### Relationships

None

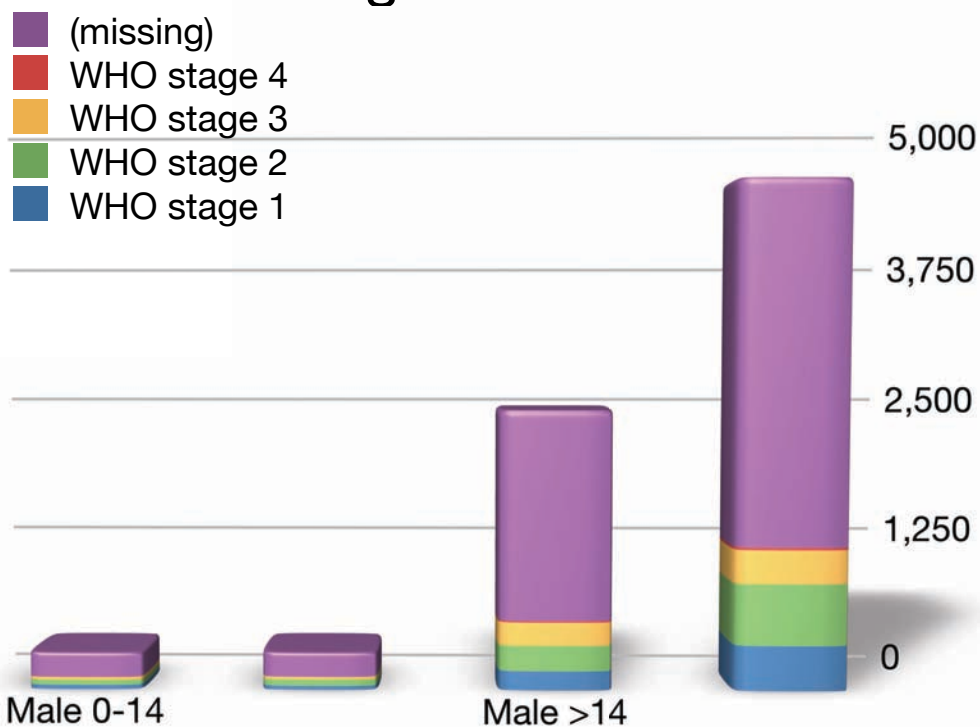
[Add a new relationship](#)

Missing First Clinic Visit  
Missing Maternal Profile



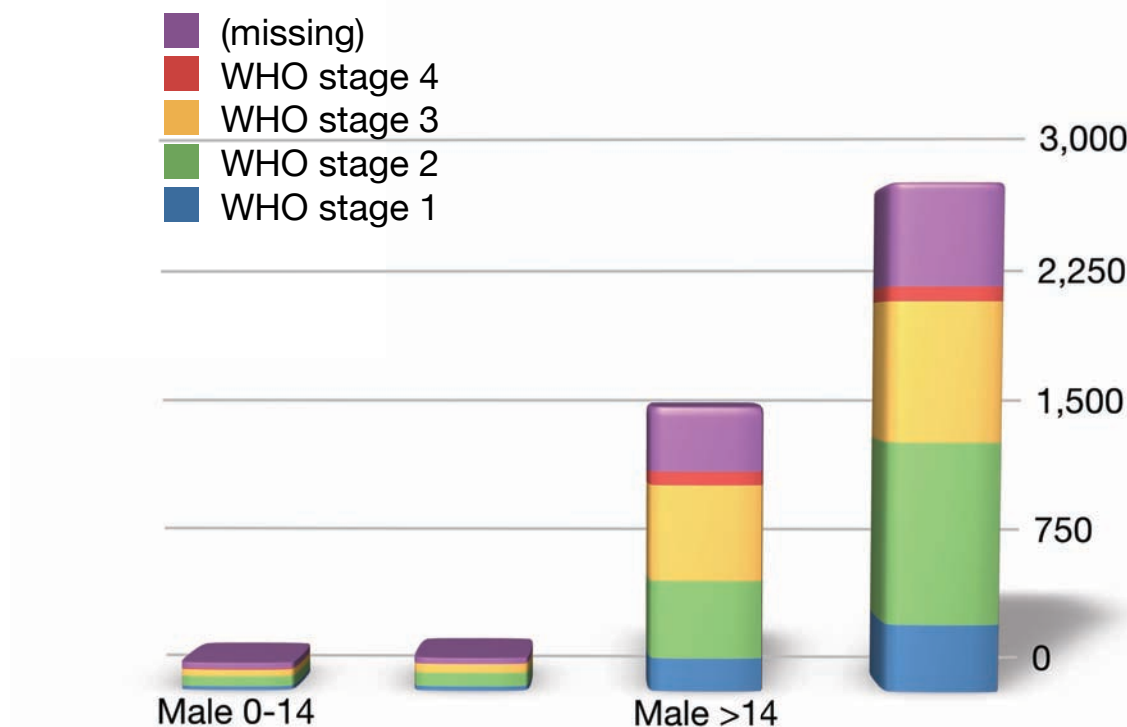
## Data reminders

missing data before...

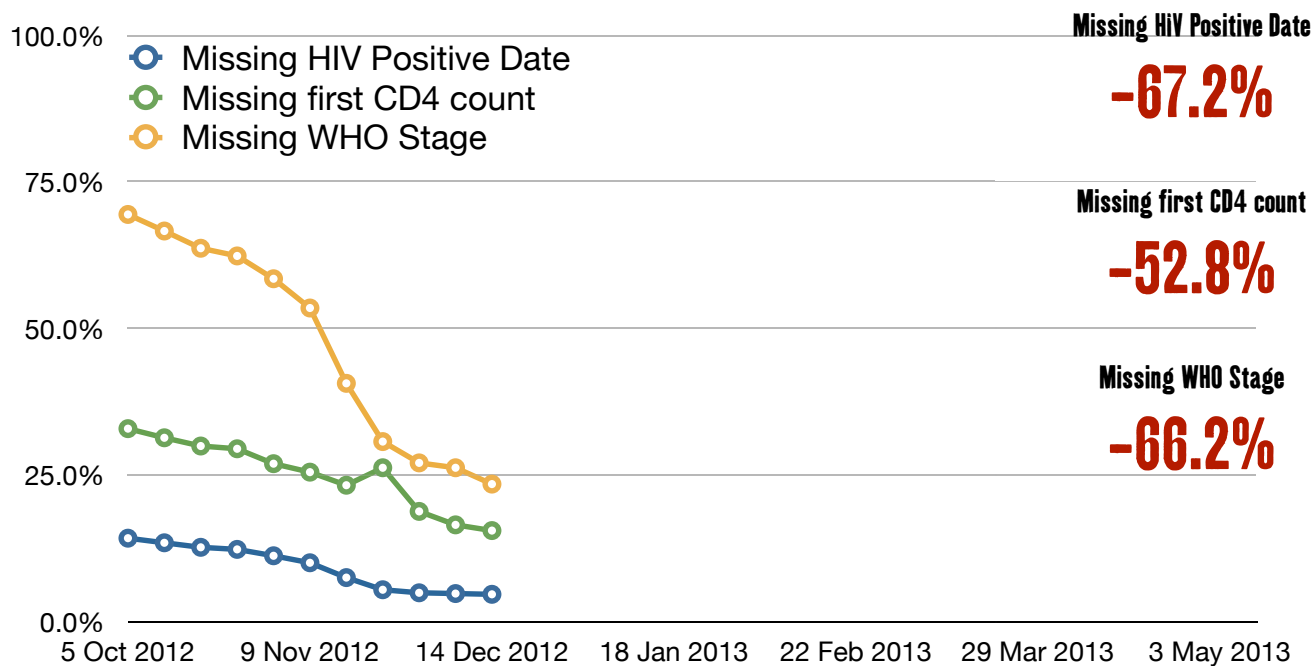




## and after...



## Missing data



## (3) Clinical reminders

Overview	Regimens	Encounters	Demographics	Graphs									
<b>Patient Flags</b> <div>HIV status: Please ensure prophylaxis</div> <div>Missing First Clinic Visit</div>													
<b>Patient Actions</b> <div>Exit Patient from Care</div>													
<b>Programs</b> <table border="1"> <thead> <tr> <th>Program</th> <th>Enrollment Date</th> <th>Location</th> </tr> </thead> <tbody> <tr> <td>Enrolled in MCH Clinic</td> <td>04-Apr-2013</td> <td></td> </tr> <tr> <td colspan="3">Add a new program</td> </tr> </tbody> </table>					Program	Enrollment Date	Location	Enrolled in MCH Clinic	04-Apr-2013		Add a new program		
Program	Enrollment Date	Location											
Enrolled in MCH Clinic	04-Apr-2013												
Add a new program													
<b>Relationships</b> None Add a new relationship													

## MCH Verification

**Start date:** 02/04/2013

**End date:** 12/04/2013

**Location:**

A1	Missing Program Enrolment Date	0
A2	Missing Program Enrolment Location	0
A3	Missing Maternal Profile	7
A4	Missing First Clinic Visit (Maternal)	9
A5	Missing Clinic Visit (>3 months)	3
A6	Missing Child Profile	10
A7	Missing First Clinic Visit (Child)	25
C1	Danger Sign: Vaginal Bleeding	0
C2	Danger Sign: Fits	0
C3	Danger sign: Severe Abdominal Pain	0
C4	Danger Sign: Severe Headache	0
C5	Danger Sign: Very Pale	0
C6	Danger Sign: Fever	0
C7	Danger Sign: No or Reduced Foetal Movements	0
C8	Maternal HIV Status	12
generated by ops   12-Apr-2013 02:23:32		

## MCH Verification

**Start date:**

02/04/2013

**End date:**

**Location:**

### C8: Maternal HIV Status (12 Patients)

patientId	givenName	familyName
118		
193		
201		
221		
230		
239		
242		
299		
331		
335		

 26 yrs (~ 01-Jan-1987)

BMI: ? ( Weight: 71.0 kg , Height: )

Last encounter: **Return Visit @**

**Overview**

**Regimens**

**Encounters**

**Demographics**

**Graphs**

#### Patient Flags

**HIV status: Please ensure prophylaxis**

**Missing First Clinic Visit**

#### Patient Actions

[Exit Patient from Care](#)

#### Programs

Program	Enrollment Date	Location
<a href="#">Enrolled in MCH Clinic</a>	04-Apr-2013	
<a href="#">Add a new program</a>		

#### Relationships

None

[Add a new relationship](#)

**HIV status: Please ensure prophylaxis**

**Missing First Clinic Visit**



**Data reminders**



**Clinical reminders**





## (4) Follow Up



Overview	Regimens	Encounters	Demographics	Graphs
<b>Patient Flags</b>				
Patient not attended Clinic for >3 months				
Missing First Clinic Visit				
<b>Patient Actions</b>				
<a href="#">Exit Patient from Care</a>				
<b>Programs</b>				
Program	Enrollment Date	Location		
<a href="#">Enrolled in MCH Clinic</a>	04-Apr-2013			
<a href="#">Add a new program</a>				
<b>Relationships</b>				
None				
<a href="#">Add a new relationship</a>				



## MCH Verification

**Start date:** 02/04/2013

**End date:** 12/04/2013

**Location:**

A1	Missing Program Enrolment Date		0
A2	Missing Program Enrolment Location		0
A3	Missing Maternal Profile		7
A4	Missing First Clinic Visit (Maternal)		9
A5	Missing Clinic Visit (>3 months)		3
A6	Missing Child Profile		10
A7	Missing First Clinic Visit (Child)		25
C1	Danger Sign: Vaginal Bleeding		0
C2	Danger Sign: Fits		0
C3	Danger sign: Severe Abdominal Pain		0
C4	Danger Sign: Severe Headache		0
C5	Danger Sign: Very Pale		0
C6	Danger Sign: Fever		0
C7	Danger Sign: No or Reduced Foetal Movements		0
C8	Maternal HIV Status		12
			generated by ops   12-Apr-2013 02:23:32



## MCH Verification

**Start date:** 02/04/2013

**End date:** 12/04/2013

**Location:**

### A5: Missing Clinic Visit (>3 months) (3 Patients)

patientId	givenName	familyName
200		
289		
301		

Viewing 1 - 3 of 3

17 yrs (~ 01-Jan-1996)

**BMI: ?** ( Weight: 56.2 kg , Height: )

Last encounter: **Return Visit @ I**

[Overview](#)
[Regimens](#)
[Encounters](#)
[Demographics](#)
[Graphs](#)

**Patient Flags**

Patient not attended Clinic for >3 months  
 Missing First Clinic Visit

**Patient Actions**

[Exit Patient from Care](#)

**Programs**

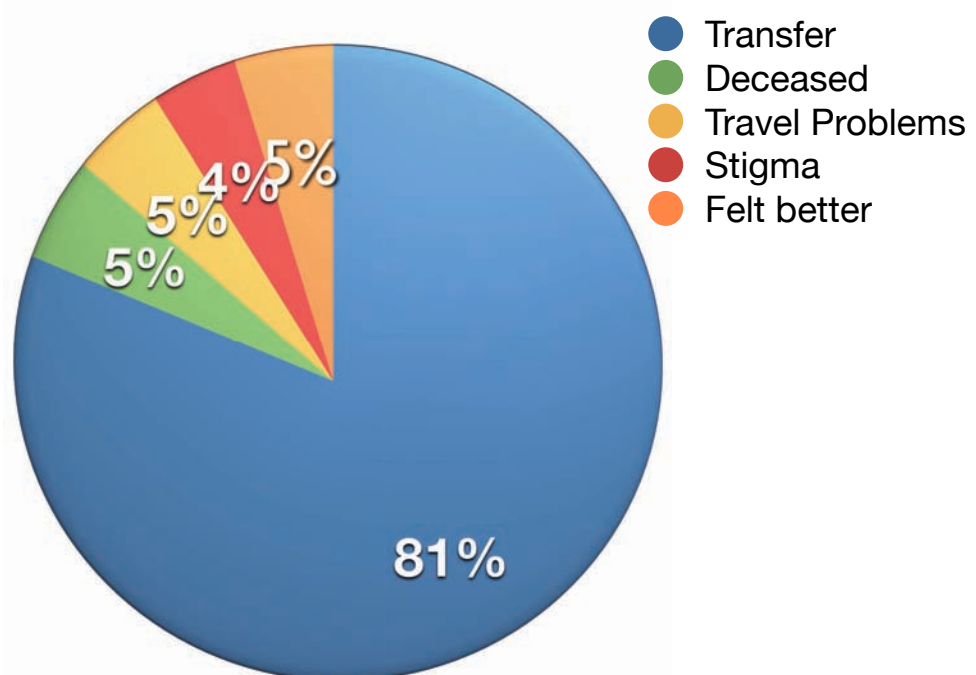
Program	Enrollment Date	Location
<a href="#">Enrolled in MCH Clinic</a>	04-Apr-2013	
<a href="#">Add a new program</a>		

**Relationships**

None

[Add a new relationship](#)

## Reasons lost to follow-up





## (5) Indicator Dashboard



### MCH Programme Indicators updated on 12th April 2013

[Home](#)[Overview](#)[Data](#)[ANC](#)[Delivery](#)

#### Women Enrolled

222  
(%)

Total pregnant women [enrolled](#)

#### Deliveries Registered

37  
(%)

Total deliveries registered

#### Children Enrolled

53  
(%)

Total children born to enrolled mothers

#### Women on ART

1  
(%)

HIV+ pregnant women [receiving ART](#)

#### Malaria Prophylaxis

13  
(%)

Pregnant women [completed IPT1-3](#)

#### Complete Records

69  
(%)

Records without [missing data](#)



# Summary

- ☒ Electronic MOH2I6
- ☒ Data Entry
- ☒ Data verification
- ☒ Clinical reminders
- ☒ Programs eg. Follow Up
- ☒ Performance Management
- ☒ Indicator Dashboard

**MCH Dashboard**

[uamuzibora.org/data/mch](http://uamuzibora.org/data/mch)

**MCH Demo**

[uamuzibora.org/demo/mch](http://uamuzibora.org/demo/mch)