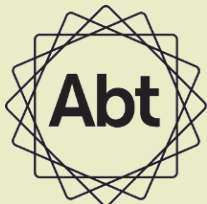


# Do Free Pregnancy Test Kits Increase the Number of Family Planning Clients Supplied by CHWs?

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Making Impact Evaluation Matter: Better Evidence for Effective Policies and Programmes  
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**Abt Associates leads the project in collaboration with**  
Banyan Global  
Jhpiego  
Marie Stopes International  
Monitor Group  
O'Hanlon Health Consulting

# Outline

- Background
- Study methodology
- Results



# Background

# Modern Family Planning in Madagascar

- In rural Madagascar, community health workers (CHWs) are an important source of FP
  - The most popular FP methods are injectable and oral hormonal contraceptives
  - CHWs sell these contraceptives
- Barriers to selling more hormonal contraceptives:
  - CHW must first rule out pregnancy using a pregnancy checklist, which is viewed as unreliable (Stanback 2013)
  - Must also find opportunities to speak with women about modern FP

# The Intervention

- Providing pregnancy test kits to community health workers (CHWs) to distribute for free
  - Pregnancy tests not previously available to CHWs
    - Until recently, too expensive
    - Now much cheaper (~0.22 USD)
  - CHWs also given training on how to use the test kit
- Sales could increase by
  1. Improving access: CHWs might use test to complement or replace the pregnancy checklist for women seeking FP
  2. Generating interest: women might come to CHW for a pregnancy test, resulting in opportunity to discuss FP

# Madagascar: CHW Program



- CHWs recruited in rural areas  
> 5 kms from nearest health center
- Sell oral and injectable contraceptives (among other products) at a small profit
- Often have other employment

# The Pregnancy Checklist

## How to be Reasonably Sure a Client is Not Pregnant

Ask the client questions 1–6. As soon as the client answers YES to any question, stop, and follow the instructions.

NO	1. Did you have a baby less than 6 months ago, are you fully or nearly-fully breastfeeding, and have you had no menstrual period since then?	YES
NO	2. Have you abstained from sexual intercourse since your last menstrual period or delivery?	YES
NO	3. Have you had a baby in the last 4 weeks?	YES
NO	4. Did your last menstrual period start within the past 7 days (or within the past 12 days if you are planning to use an IUD)?	YES
NO	5. Have you had a miscarriage or abortion in the past 7 days (or within the past 12 days if you are planning to use an IUD)?	YES
NO	6. Have you been using a reliable contraceptive method consistently and correctly?	YES

If the client answered NO to all of the questions, pregnancy cannot be ruled out. The client should await menses or use a pregnancy test.

If the client answered YES to at least one of the questions and she is free of signs or symptoms of pregnancy, provide client with desired method.



## Challenges with checklist:

- CHW may not trust a woman's responses
- Some women are categorized as "could be pregnant" but are not

# Pregnancy Test Kits

- Biomedical measurement
- If CHWs had test kits...
  - Fewer missed opportunities to provide contraceptives to clients who want them
  - May attract women who want to check pregnancy status - opportunity for FP counseling



(Cypress Diagnostics hCG Dipstrip)



# Summary of Research Agenda

## Intervention

Offering free pregnancy test kits to CHWs for distribution to clients, along with training on how to use these tests

➡ CHWs not told to use test to complement checklist

## Research Questions

Does the intervention increase:

- 1) The number of new hormonal contraceptive clients that CHWs supply contraceptives to?
- 2) The number of individual FP counseling sessions?

# Study Methodology

# Study Participants



(CHW holding informational chart)

- All CHWs supported by the Santénet2 project and trained in oral and injectable contraceptives
- Eligible participants: 622 CHWs

## Sites



# Study Design: Randomized Intervention

## Treatment group

Offered free pregnancy test kits  
+  
Training on how to use them

311 CHWs

## Control group

No free pregnancy test kits  
+  
No training on kits

311 CHWs

**(Outcome in T group) – (Outcome in C group) = Effect of the intervention**

Note: CHWs were randomized at the individual level.

# Trainings

## Treatment group

1. Invited to the training
  - Filled baseline data survey
  - Trained on reporting forms

2. Trained on pregnancy test kits

3. Given pregnancy test kits to distribute for free
  - 50 kits per CHW

## Control group

1. Invited to the training
  - Filled baseline data survey
  - Trained on reporting forms

# Outcome Data Collection

- Monthly reporting forms filled out by CHWs
  - For 4 months after training
  - Treatment and control CHWs
- Data collected on:
  - Number of FP clients
    - By FP method
    - New versus regular contraceptive users
  - Number of FP counseling sessions
  - Use of pregnancy checklist
  - Number of test kits distributed (Treatment group only)

# Baseline: Characteristics of CHWs



Baseline Characteristics	Sample
Age (years)	43
% female	68%
Highest class attained (average)	5 <sup>th</sup> grade
Number of years worked as CHW	5.5 years
Number of years since training on injectables	3.5 years
Currently uses family planning	70%
Distance to nearest health center (minutes walking)	124 minutes

# Baseline: CHWs' Contraceptive Clients

	Number of monthly clients supplied by CHWs
Injectables	24.0
Oral contraceptives	13.7
Condoms/spermicides	0.5
Standard days methods/cycle beads	0.9
<b>All contraceptives</b>	<b>39.2</b>



# Reluctance to Use Pregnancy Checklist as Intended

<b>CHW reported that:</b>	<b>% of CHWs</b>
Has used pregnancy checklist	94%
Believes the checklist is “very reliable”	46%
Believes s/he can provide hormonal contraceptives to non-menstruating women	6%
Instructed not to provide hormonal contraceptives to non-menstruating women	91%

# Analytical Approach

Using a weighted least squares regression model with month fixed effects, we estimated:

$$y_{idt} = \alpha + \beta Treatment_i + \gamma X_i + \tau_t + \delta_d + \varepsilon_{idt}$$

for individual  $i$  in district  $d$  at time  $t$ .

Variables	Definitions
$y$	Number of new hormonal contraceptive clients
$Treatment$	Dummy variable for whether were offered free pregnancy test kits
$X$	Vector of CHWs' baseline characteristics
$\tau$	Month fixed effect
$\delta$	District fixed effect
$\varepsilon$	Random error

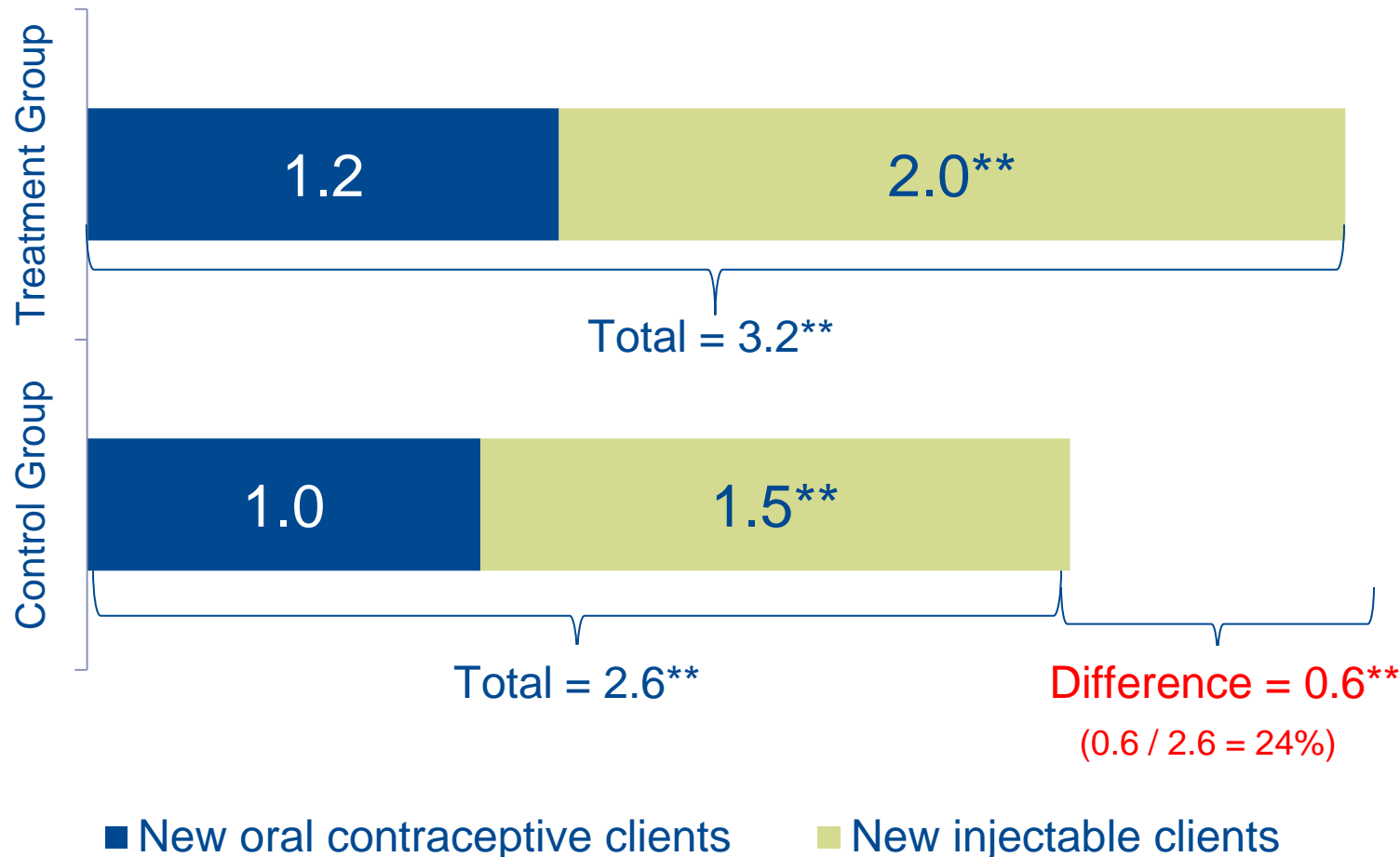
The study measured the *intent-to-treat* effect, i.e. the impact of offering CHWs the tests and training on how to use them

# Results

## **Question 1:**

**Does the intervention increase the number of new hormonal contraceptive clients that CHWs supply contraceptives to?**

# 24% Increase in Number of New Hormonal Contraceptive Clients Supplied by CHWs



\*\* indicates that the difference is statistically significant at the 95% level ( $p < 0.05$ )

## **Question 2:**

**Does the intervention increase the number of individual FP counseling sessions conducted by CHWs?**

# No Significant Effect on Number of FP Sessions

	Treatment group	Control group
Individual FP counselling sessions conducted by CHW per month	17.2	16.0

- The difference is not statistically significant
- Estimate not precise enough to rule this out as a possible mechanism

# Limitations of the Study

- Used self-monitoring data
  - Non-response: 62% of total reports submitted
  - Data quality concerns; recommend survey team instead
- Generalizability
  - Estimates valid for Eastern Madagascar
  - Planting season, exhumation period, other public health activities = less time to work as CHW
- Reports of contraceptive stockouts in some districts



# Summary of Findings

Offering free pregnancy test kits for CHWs to distribute along with training on their use:

1. Increases the number of new hormonal contraceptive clients they supply
  2. However, we were unable to detect an impact on the number of individual FP sessions
- More research on the underlying mechanism is needed
  - Impact could be larger if CHWs were trained on using test to complement checklist



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*through* the Private Sector

# Extra slides



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# Hypothesized Chain of Causality

CHWs are offered pregnancy test kits to distribute for free + training on how to use these kits

CHWs use tests to check whether women who want contraceptives are pregnant

1. CHWs use test kits (instead of pregnancy checklist) for all new clients who want contraceptives

or

2. CHWs use test kits only for women whom the checklist categorizes as "could be pregnant"

Women who want to check whether they are pregnant approach CHWs for the tests

CHWs provide free tests and use this opportunity to also **provide FP counseling**

Some women who are not pregnant decide to take up contraceptives

Women with negative pregnancy test results become **new contraceptive clients of CHWs**

# Intervention and Evaluation Timeline

2013

Follow-up: study data collection

Mar

Apr

May

Jun

Jul

Aug

Sept

Oct

Nov

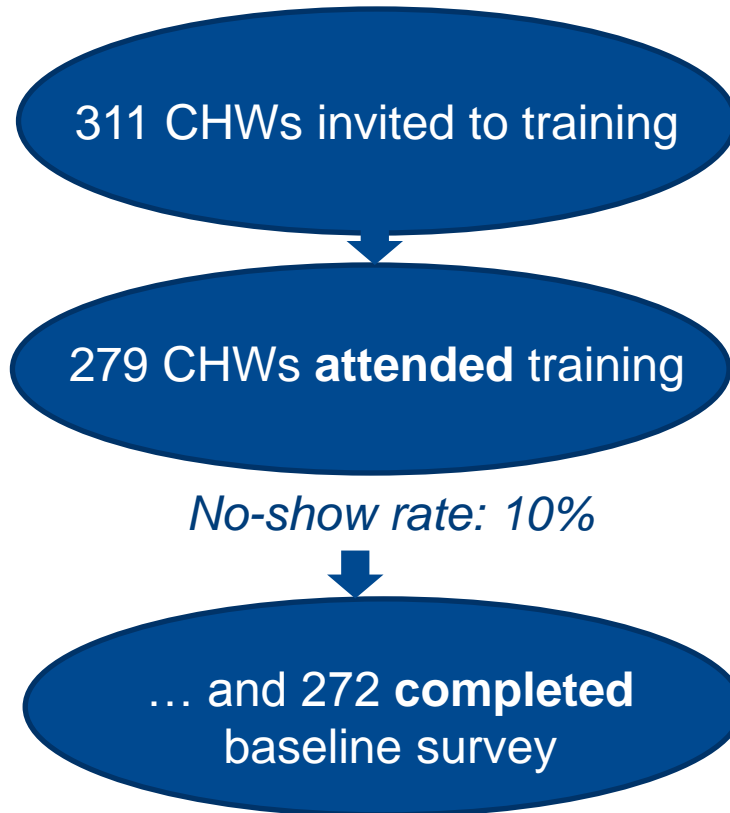
**CHWs invited to trainings**  
(baseline data collection and pregnancy test distribution)

**Trainings held**  
**Baseline survey**

**CHWs distribute pregnancy tests and submit monthly monitoring forms**  
(4 months after training for each CHW)

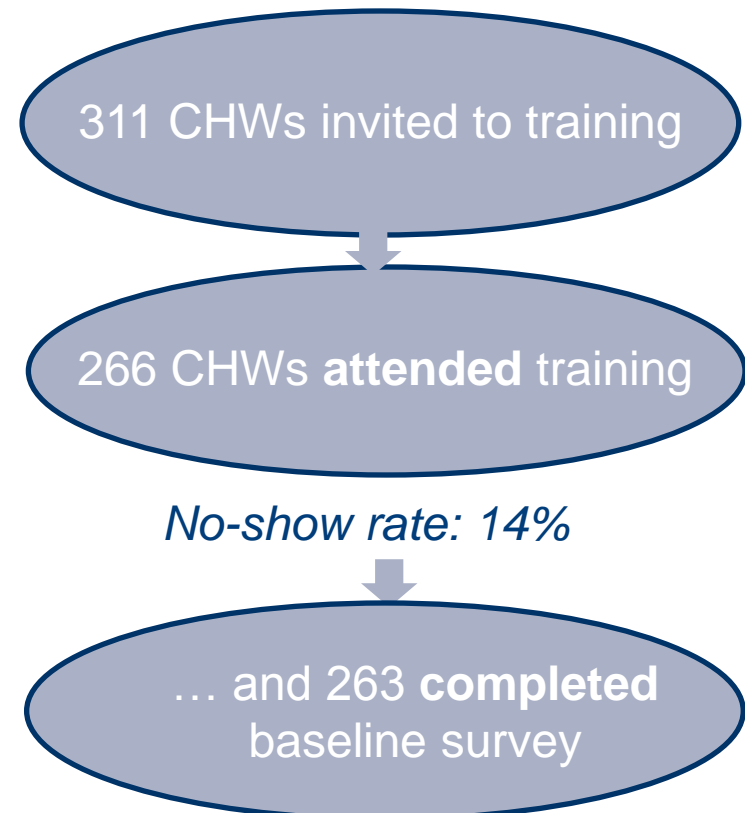
# Number of Study Participants

## Treatment group



*...and not complete baseline data: 13%*

## Control group



*...and not complete baseline data: 15%*