# Impact evaluation of Zambia Health Results-Based Financing Pilot

Submission date	Recruitment status No longer recruiting	<ul><li>Prospectively registered</li></ul>		
04/11/2014		☐ Protocol		
Registration date	Overall study status Completed	Statistical analysis plan		
12/12/2014		[X] Results		
Last Edited	Condition category	[] Individual participant data		
13/08/2020	Other			

#### Plain English summary of protocol

Background and study aims

This study will evaluate the impact of results-based financing (RBF) on priority maternal and child health services in rural districts of Zambia. RBF is an output-based financing mechanism where the health providers receive financial incentives on achieving a pre-agreed set of services upon verification of the achieved results. The overall objective of the HRBF is to increase access to, and the use of, key maternal and child health interventions. The impact evaluation will generate valuable evidence to determine whether this goal is attainable under the proposed policies. In addition, the impact evaluation will contribute to the government's intentions to strengthen Central and Province-level capacities for evidence-based policy and program management for improving maternal and child health (MCH). The study will address the following three primary research questions: (a) What is the causal effect of the Zambian HRBF on the population health indicators of interest specifically on maternal and child health? (b) Do higher incentive payments in rural/remote areas result in increased health outcomes and greater retention of staff? (c) How does the likelihood of audit/external verification of results affect the accuracy of reported data?

### Who can participate?

Participating health facilities from 30 rural districts triplet-matched on key health systems and outcome indicators and randomly allocated to three arms with ten districts per arm.

#### What does the study involve?

This study tests the effectiveness of RBF in comparison with input (equivalent) financing, and business-as-usual. Within each rural province, a triplet of districts with similar characteristics has been selected. Thus, 30 rural districts (10 triplets) have been selected from all rural provinces in the country. Within each matched triplet, districts have been randomly allocated to implement one of the three interventions (RBF, equivalent financing or business-as-usual). All health facilities (excluding private-for-profit) in these 30 districts participate in this study. Health facilities within the RBF intervention will receive RBF incentives every quarter conditional on their performance on a set of indicators related to maternal and child health. The facilities will receive incentives on achieving quantity (volume of services) and quality (adherence to national standards of care). Remote facilities in addition will receive a remoteness bonus. Health facilities within the equivalent financing intervention will receive resources matching with the RBF

incentives. However, these resources will not be conditional on performance. Health facilities within the business-as-usual intervention will not receive any additional resources or inputs. The study measures the outcomes of the interventions at the population and health facility levels. The outcomes will be measured through two rounds of surveys involving health facilities and households within the catchment areas of these facilities selected for this intervention. The first round of survey was completed before the interventions were implemented and the second round of survey will be undertaken after the completion of the implementation. The study will also employ qualitative surveys and cost-effectiveness analysis.

What are the possible benefits and risks of participating? Health facilities in the RBF intervention and the equivalent financing groups will benefit from financial resources tied with performance and not conditional on performance, respectively. There are no adverse effects or risks of this intervention.

Where is the study run from?

There are 523 health facilities from 30 rural districts participating in this study. The implementing agency is the Ministry of Health, Zambia.

When is study starting and how long is it expected to run for? The intervention started in April 2012 and is expected to continue until July 2015.

Who is funding the study?

Governments of Norway and the UK through the Health Results Innovation Trust Fund administered by the World Bank.

Who is the main contact? Ashis Das adas8@worldbank.org

# Contact information

## Type(s)

Scientific

#### Contact name

Dr Jed Friedman

#### Contact details

1818 H St NW Washington, D.C. United States of America 20433

# Additional identifiers

**EudraCT/CTIS** number

IRAS number

ClinicalTrials.gov number

### Secondary identifying numbers

N/A

# Study information

#### Scientific Title

Assessing the impact of results-based financing in health on maternal and child health access and utilization: Impact evaluation of Zambia's Health Results-Based Financing Pilot

#### Acronym

Zambia RBF IE

#### Study objectives

Results based financing increases access to and utilization of maternal and child health services in rural Zambia

#### Ethics approval required

Old ethics approval format

#### Ethics approval(s)

Humanities and Social Sciences Research Ethics Committee, University of Zambia, 23/06/2011

#### Study design

Randomized controlled trial

### Primary study design

Interventional

### Secondary study design

Randomised controlled trial

### Study setting(s)

Other

## Study type(s)

Quality of life

# Participant information sheet

N/A

## Health condition(s) or problem(s) studied

Maternal and child health

#### Interventions

Health facilities within RBF districts will receive incentives every quarter based on attaining:

- 1. Quantity (volume of services)
- 2. Quality (adherence to national standards of care)

Health facilities within equivalent financing districts will receive resources every quarter similar to the health facilities under their matching RBF district

Health facilities within business-as-usual districts will receive no additional resources or inputs.

#### Intervention Type

Other

### Primary outcome measure

Health utilization indicators:

- 1. Antenatal care
- 2. Institutional delivery
- 3. Postnatal care
- 4. Immunization
- 5. Adoption of family planning methods

#### Household level indicators:

- 1. Household health-seeking behavior
- 2. Out-of-pocket healthcare expenditure
- 3. Satisfaction on the service provider

#### Secondary outcome measures

Health facility infrastructure indicators:

- 1. Drug stockout rates
- 2. Availability of drugs
- 3. Availability of equipment
- 4. Updated records

#### Quality of care indicators:

- 1. Counseling and client interaction
- 2. Waiting time
- 3. Physical examination

#### Equity indicators:

1. Utilization of health care and quality of care indicators vis-à-vis clients' socio-economic and residence status

#### Health worker indicators:

- 1. Health worker training status
- 2. Knowledge
- 3. Motivation
- 4. Job satisfaction

#### Overall study start date

01/04/2012

#### Completion date

01/06/2015

# **Eligibility**

# Key inclusion criteria

Health facility inclusion criteria:

- 1. Health centers and health posts (public and faith-based) within the selected 30 rural districts
- 2. Health centers and health posts contracted under RBF project

3. All public and faith-based health centers and health posts in input financing and business-asusual districts

#### Participant type(s)

**Patient** 

#### Age group

Other

#### Sex

Both

# Target number of participants

All health facilities in participating rural districts (n=523)

### Key exclusion criteria

Health facility exclusion criteria:

- 1. Health centers and health posts outside the selected 30 rural districts
- 2. Private-for-profit health centers and health posts

#### Date of first enrolment

01/04/2012

#### Date of final enrolment

01/06/2015

# Locations

#### Countries of recruitment

United States of America

Zambia

# Study participating centre

The World Bank

Washington, D.C. United States of America 20433

# Sponsor information

#### Organisation

Health Results Innovation Trust Fund, World Bank (USA)

# Sponsor details

The World Bank 1818 H St NW Washington, DC United States of America 20433

### Sponsor type

Government

#### Website

https://www.rbfhealth.org/

#### ROR

https://ror.org/00ae7jd04

# Funder(s)

#### Funder type

Government

#### **Funder Name**

Health Results Innovation Trust Fund, World Bank (USA)

# **Results and Publications**

# Publication and dissemination plan

Not provided at time of registration

Intention to publish date

Individual participant data (IPD) sharing plan

# IPD sharing plan summary

Not provided at time of registration

### **Study outputs**

Output type	Details	Date created	Date added	Peer reviewed?	Patient-facing?
Results article	results	01/11/2018	13/08/2020	Yes	No