



# FISTULA FOUNDATION'S “ACTION ON FISTULA” PROGRAM

IDinsight | August 23<sup>rd</sup> 2017

# Agenda

- Fistula Engagement Overview
- Program Overview
- Fistula Treatment Cost
- Fistula Cost Effectiveness Outcome
- Next Steps

# Engagement Overview

## Main Question:

- How much does it cost to identify and treat a fistula patient who would not otherwise receive access to care?

## Approach:

- Collect cost data on Fistula Foundation's Action on Fistula program in Kenya to attain an **initial view on cost-effectiveness potential**.

# Action on Fistula at a glance

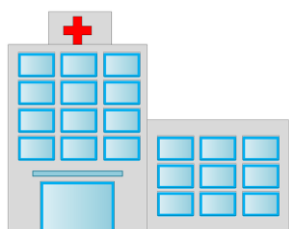
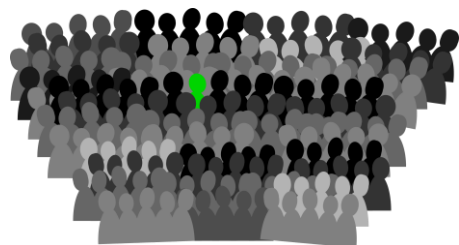
In 2014, Fistula Foundation started the Action on Fistula program in Kenya after receiving \$1.875 million from Astellas Pharma EMEA.

Program Goals		
	Phase 1 (May 2014 - April 2017)	Phase 2 (May 2017 - April 2020)
<b>Inflow</b>	\$ 3.75 million	\$ 3.29 million
<b>Fistula Treatment Targets</b>	2,500	2,000

Current presence:

- Community outreach in 14 out of 47 counties in Kenya
- 7 health facilities performing fistula surgeries

# The Action on Fistula program uses a 3 step approach



## 1. Community Outreach (Outsourced to 5 NGOs)

- Community mobilization to raise awareness on fistula.
- Training workshops for local community to identify fistula.
- Stakeholder engagement within communities (health staff, government officials, midwives and so on) to create a fistula treatment network.
- Verbal screen of fistula based on a pre-determined questionnaire to identify potential fistula patients.
- Referral of fistula patients to health facilities for treatment (cater for transport costs and airtime costs).

## 2. Fistula Surgery

- Physically screen fistula patients once referred to the health facility.
- Perform fistula surgery in the pre-identified health facilities.
- Provide post-operative care to patients.

## 3. Follow Up & Reintegration (Outsourced to 5 NGOs)

- Follow up with patients that need further medical treatment in case of complications or the need for more than one surgery due to complexity of the surgery.
- Follow up done through household check ins and phone calls.
- Reintegrate patients socially and economically into the community.
  - **Social integration:** Provide peer to peer counselling and mentorship.
  - **Economic reintegration:** Provide skills building sessions such as tailoring and carpentry to enable them to earn an income.

# Fistula Foundation's Action on Fistula data reporting

	Projection	Reporting
<b>Financial tracking</b>	<p><b>Fistula Foundation</b></p> <ul style="list-style-type: none"> <li>Fistula Foundation submits an annual budget to funders for funding requests based on yearly targets.</li> </ul> <p><b>Outsourced NGOs</b></p> <ul style="list-style-type: none"> <li>Outsourced NGOs submit an annual budget to Fistula Foundation for review by the board. Once approved, funds are released to the NGOs.</li> </ul>	<p><b>Fistula Foundation</b></p> <ul style="list-style-type: none"> <li>Fistula Foundation publishes an annual financial report (based on quarterly reports) in Euro and Dollar denomination.</li> <li>This is accompanied by an annual write up on the expenditures.</li> </ul> <p><b>Outsourced NGOs</b></p> <ul style="list-style-type: none"> <li>Outsourced NGOs submit quarterly financial reports indicating their expenditures based on the targets set out in the annual budget.</li> </ul>
<b>Outcome / impact tracking</b>	<p><b>Fistula Foundation</b></p> <ul style="list-style-type: none"> <li>Fistula Foundation submits and annual impact target with regards to community outreach, surgeries performed and patients reintegrated back into society.</li> </ul> <p><b>Outsourced NGOs</b></p> <ul style="list-style-type: none"> <li>Outsourced NGOs submit annual target to Fistula Foundation detailing their strategy to reach the target.</li> </ul>	<p><b>Fistula Foundation</b></p> <ul style="list-style-type: none"> <li>Fistula Foundation submits annual impact based on community reach and surgeries performed on a quarterly and annual basis.</li> </ul> <p><b>Outsourced NGOs</b></p> <ul style="list-style-type: none"> <li>Outsourced NGOs submit quarterly impact/reach outcomes to Fistula Foundation for tracking purposes.</li> </ul>

# Fistula Foundation's Action on Fistula cost modelling

Fistula Foundation provided:

- Annual financial statements for Phase 1 (May 2014- April 2017).
- Annual projections for Phase 2 (May 2017- April 2020) based on a target of 1,225 patients.

The datasets provided were used to calculate:

- Overall yearly fistula treatment costs based on overall costs and patients treated.
- Impact of cost on draft fistula CEA model.<sup>1</sup>

<sup>1</sup>The outcome ranges provided in the draft fistula CEA model were left unchanged as these will be affected when analyzing impact of fistula surgery.

# The average cost per treated patient is \$1,169

Average Fistula Treatment Costs Breakdown		
<b>Direct costs</b>		<b>\$ 1,022</b>
	Community outreach <sup>2</sup>	\$ 282
	Fistula surgery	\$ 712
	Reintegration	\$ 28
<b>Indirect costs</b>		<b>\$ 147</b>
	Doctor and nurse training	\$ 17
	Program management	\$ 97
	Administration	\$ 6
	M & E	\$ 11
	Partnership and Collaboration	\$ 8
	Marketing and Communications	\$ 8
<b>Total costs per fistula treatment</b>		<b>\$ 1,169</b>

<sup>2</sup>Follow up is included in the community outreach costs as they part of the community outreach strategy and budget.



# The cost per patient has decreased since the onset of the program

Average Fistula Treatment Cost Per Patient						
	Phase 1			Phase 2		
	Year 1 (May '14- April '15)	Year 2	Year 3	Year 4*	Year 5*	Year 6*
Fistula treatment cost per patient	\$ 1,666	\$ 1,150	\$ 1,309 <sup>3</sup>	\$ 1,042	\$ 1,066	\$ 1,087

The anticipated cost reduction over the six year time period is due to:

1. 33% cost reduction in patient identification
2. 20% cost reduction in health facility treatment
3. 28% cost reduction in indirect activities

**Detail on cost reduction drivers on the following slide**

\* Denotes a projected costs.

<sup>3</sup> Additional mobilization efforts were required to keep up with demand for services and more funds were spent on transport of clients.

# The cost per patient has decreased since the onset of the program

33% cost reduction in patient identification

1. Change in community outreach strategy from a 'one-size fits all' approach to an ever changing strategy based on cultural differences among communities.
2. Increased trained community outreach agents to increase community reach and patient identification.
3. Involvement of health facility at the community outreach stage increases referrals to health facilities.

20% cost reduction in health facility treatment

1. Increased bargaining power due to large volumes of referrals to health facilities.

28% cost reduction in indirect activities

1. Reduction in program management costs as most of the activities have been outsourced and the program has stabilized since inception.
2. Reduction in marketing and communication costs as new less expensive approaches such as verbal communication, pamphlets in health facilities and so on have proven to be more effective.

# Fistula Draft CEA Overview

The preliminary fistula CEA Model looks at 5 main parameters.

Parameter	Value	Source
Fistula treatment cost	\$ 1,169	Based on data collected from Fistula Foundation's Action on Fistula program.
Discount rate	3%	Based on general returns to investment as used in the current Top Charity models.
Proportion of surgeries that result in long term continence	70%	Based on literature: 'Rate of post-surgical continence in Arrowsmith, Barone, and Ruminjo 2013, meta-analysis'.
Age: Average age at repair	36.8 years	Based on Fistula Foundation's Action on Fistula 'Annual Program Report'.
Life expectancy at repair	70 years	Based on 'WHO 2015 life expectancy for women'.
Value assigned in averting 1 year of fistula	0.254 - 0.659	Individuals' moral valuation of the benefit of averting fistula burden provided by GiveWell.

# Fistula Draft CEA Overview

However, due to uncertainty surrounding impact of fistula treatment, a range is provided for impact based on literature review and these ranges affect final outcome comparison:

- **Pessimistic scenario:** Worst case scenario of low surgery impact on the lives of the treated women.
- **Anticipated scenario:** Average outcome based on research done.
- **Optimistic scenario:** Best case scenario of high surgery impact on the lives of the treated women.

	Value Assigned in Averting 1 year of Fistula
Pessimistic scenario	0.254
Anticipated scenario	0.507
Optimistic scenario	0.659

# Fistula Draft CEA Outcome Calculation

From the values in the 5 main parameters, the outcome is arrived as follows:

- **Step 1: Calculate discounted years in fistula averted**

$$= \text{Present value}(\text{Discount rate, years of averted fistula suffering})$$

- **Step 2: Calculate cost per (time-discounted) year with fistula averted**

$$= \left( \frac{\text{Cost per patient}}{\text{Proportion of surgeries that result in longterm continence}} \right) * \text{Discounted years with fistula averted}$$

- **Step 3: Calculate total units of value per \$10,000 donate**

$$= \left( \frac{\$10,000}{\text{Cost per (time discounted) year with fistula averted}} \right) * \text{Value assigned in averting 1 year of fistula}$$

- **Step 4: Calculate outcome comparison**

$$= \frac{\text{Total unit of value per 10,000 donated}}{\text{GiveDirectly Units of Value per \$10,000 donated}}$$

and

$$\frac{\text{Total unit of value per 10,000 donated}}{\text{AMF Units of Value per \$10,000 donated}}$$

# Even pessimistic cost-effectiveness estimates exceeds the top charity cutoff

GiveWell's Preliminary Fistula CEA model suggests a tentatively high cost-effectiveness potential for fistula programs based on Action on Fistula costs:

Outcome Comparison			
	Pessimistic scenario	Anticipated scenario	Optimistic scenario
Fistula vs Give Directly	3.30	6.58	8.56
Fistula vs AMF	1.01	2.02	2.62

Now that we have reasonable cost data, we now need to assess impact. We recommend moving ahead with 1) partner selection for potential field-based investigation and 2) literature review to start unpacking the impact side of the equation.

# Next Steps

IDinsight to **review literature and identify a partner** to work with to measure fistula surgery impact.

**GiveWell** to review the Action on Fistula Kenya program top-down financial model and provide feedback.

**IDinsight + GiveWell** start talking to potential partners and identify the most promising partner.

Cost model review

Next steps alignment

Partner review

Evaluation design

Top Charity recommendation decision

**IDinsight + GiveWell** align on next steps based on cost model review outcome.

**IDinsight** identify data gaps and design an evaluation to address these gaps.