# FLETCHER D-PRIZE COMPETITION

**2024-25 Academic Year**

# Health Access Challenges

## Increase completion of Antiretroviral Therapy (ART) to Prevent Mother-to-Child Transmission (PMTCT) of HIV

*We challenge you to design a new social enterprise that ensures HIV-positive pregnant women complete antiretroviral therapy (ART) who otherwise would not. ART can substantially reduce the risk of mother-to-child transmission. Fletcher D-Prize will award up to $20,000 to teams with a plan to launch a pilot of this work with a vision to scale country-wide.*

### The Poverty Problem

An HIV-positive mother can transmit HIV to her infant during late pregnancy, birth, or breastfeeding. The World Health Organization (WHO) estimates that between 15% to 45% of HIV-positive mothers would transmit HIV to their infants in absence of any preventative measures.[1]

### The Proven Intervention

A 2011 systematic review of randomized controlled trials of ART for HIV-positive pregnant mothers and/or their infants concluded that ART can reduce the risk of HIV transmission between mother and child by 30% to 70%.[2]

### Your Distribution Challenge

Fletcher D-Prize will award up to $20,000 to a social entrepreneur who can create a new organization that motivates and ensures pregnant women complete ART, who otherwise would not.

You must have a vision to scale your service to reach all HIV-positive women within a geographic region of 25 million people (ie, nationwide for many countries), within five years. Our

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[1] WHO Mother-to-child transmission of HIV: http://www.who.int/hiv/topics/mtct/about/en/

[2] Siegfried et al. 2011: Antiretrovirals for reducing the risk of mother-to-child transmission of HIV infection. http://www.cochrane.org/CD003510/HIV_antiretrovirals-for-reducing-the-risk-of-mother-to-child-transmission-of-hiv-infection. Also see discussion of this review in GiveWell's report on ART: http://www.givewell.org/international/technical/programs/antiretroviral-therapy-to-treat-hiv-aids#Mother-to-child_transmission

award is meant to enable the first step toward this vision by supporting a small test pilot of your idea, that serves anywhere from 100-250 HIV-positive women.

## Designing Your Social Enterprise

We believe a successful distribution entrepreneur must have compelling answers to the following questions:

(1) *Why is this intervention appropriate for your local market?* We encourage entrepreneurs to focus operations in a region with a high incidence of HIV. In addition, this should be a region where supply of ART is readily available and dependable, but where treatment rates remain low. We highly recommend you target a region where treatment completion rates are the lowest.

(2) *How will your model create demand for ART treatment **directly** among HIV-positive pregnant women who otherwise would not seek it, and how does it encourage them to complete the full treatment cycle?* Your organization could consider using incentives, reminders, or other means. We encourage you to select a model that has been shown to work in other geographics or with comparable interventions. We are especially interested in seeing any evidence you can share in support of your specific model.

You should consider solving two critical bottlenecks in your model:

1. Many HIV-positive pregnant women who would benefit from ART do not begin treatment. A successful model should show that it is influencing incrementally more women to begin treatment.
2. Many women who begin treatment will then fail to complete the full treatment cycle. There are many reasons for this, including high treatment costs, inconvenient transportation to treatment facilities, opportunity cost, etc. A successful model should address the issue of patients dropping out of treatment.

While this particular challenge focuses on preventing mother to child transmission, the WHO recommends all HIV-positive women continue ART treatments for life.[3] Models that continue serving women after pregnancy and early motherhood are acceptable.

(3) *How will you measure the marginal impact of your work?* One challenge will be proving your work leads to *marginal* or *incremental impact.* Said another way, you must prove that your model led to *more HIV-positive pregnant women adhering to ART* than if your organization did not exist.

- You will most likely have to track this data yourself, as in most operating regions there is not existing data gathering and reporting.
- During the early pilot stage, you should consider a process for tracking impact that is simple and efficient. For instance, you may consider comparing data from health centers on the total patients who complete treatment during your pilot timeline compared with

[3] https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5605762/

historical averages. (Simply tracking how many patients completed treatment is probably not enough to prove incremental impact).
- As you grow, you will need to consider more robust measurement processes.

(4) *Can your operation scale?* We seek ideas that will result in a massive increase in the number of HIV positive pregnant women completing ART who otherwise would not have completed treatment, with a target of reaching all HIV-positive pregnant women within a geographic reach of at least 25 million people in 5 years. This will be challenging.

For instance, you will have to consider the logistics of identifying HIV-positive women among a large population, how your organization interacts with them, and how you will monitor their treatment completion rates. You must also consider the costs to accomplish this, and what level of support and managerial staff you may require.

The ideal social enterprise will have a plan to raise significant funding to scale, either through investment or philanthropy.

# Ready To Apply?

Download a First Round Application Packet and start creating your proposal at https://sites.tufts.edu/dprize/.

Questions? Email Kaushik Chaudhuri at Kaushik.Chaudhuri@tufts.edu.