FLETCHER D-PRIZE COMPETITION

2022-2023 Academic Year

Health Access Challenges

Distribute a self-injectable contraceptive to underserved women

We challenge you to design a new social enterprise that increases access to the self-injectable contraceptive DMPA-SC (sold to consumers as "Sayana Press") via a private health network. Fletcher D-Prize will award up to $20,000 to teams with a plan to launch a pilot of this work, and who have a vision to serve 100,000 women within five years and scale country-wide.

The Poverty Problem

Over 200M women globally lack access to family planning products.[1] Many live in sub-Saharan Africa. For example, 21% of women in Africa who are married or in-union and want family planning products don't have access.[2]

The poverty implication is staggering. The UNFPA estimates universal access to family planning would decrease maternal death by 25%, and childhood death by up to 20%. [3] Family planning also enables freedom for women to complete education, take a job, and make other life choices.

Contraceptives, including injectable options that last months at a time, are a WHO recommended answer to this problem.[4] Contraceptives choices like injectables and IUDs are effective, less prone to user error, and often the most affordable option. [5]

However, access is limited. These contraceptive choices almost always require travel to a health clinic, and in-house administration by a trained healthcare provider, like a nurse. "Long

[1] The UNFPA estimates 232 million women in developing regions who want to avoid pregnancy are not using family planning methods (www.unfpa.org/family-planning). A 2017 GuttmacherInstitute report estimates 214 million (www.guttmacher.org/sites/default/files/factsheet/adding-it-up-contraception-mnh-2017.pdf)

[2] The 2017 Guttmacher Institute report linked above estimates 21%; a 2015 UN *Trends in Contraceptive* report estimates 24% (www.un.org/en/development/desa/population/publications/pdf/family/trendsContraceptiveUse2015Report.pdf)

[3] www.unfpa.org/family-planning "Family Planning saves Lives" section

[4] WHO notes that LARCs are better suited to family planning, like delaying children. www.who.int/bulletin/volumes/89/4/10-083329/en

[5] Especially compared to daily birth control or condomswww.path.org/articles/dmpa-sc/

distances to clinics, long waits for service, and occasional stockouts of syringes mean too many women go home without receiving the family planning method of their choice." [6]

The Proven Intervention

Fortunately, there is a proven solution. DMPA-SC (and branded for consumers as "Sayana Press") is an injectable contraceptive that prevents pregnancy for 3 months. It comes packaged in a *self-injectable* form. This means that a woman can self-administer the contraceptive herself and from the comfort of her own home, rather than traveling to a health clinic.

DMPA-SC is in high demand. Studies in Senegal and Uganda found that 86% of women preferred to self-inject, compared to 14% who preferred to receive an injection from a healthcare provider.[7] Those same studies found that 81% of women using DMPA-SC were likely to continue treatment for a year, compared to 65% for injections done at clinics.[8]

DMPA-SC is relatively low cost. The raw cost for a single dose is about $0.85.[9] The average selling price is under $2 (though this ranges depending on country and place of purchase).

Most importantly, DMPA-SC has the potential to reach millions more women. Existing contraceptives are limited by the reach of public health networks, but DMPA-SC can in theory be distributed through more last-mile channels like private drug shops and door-to-door agents.

Your Distribution Challenge

Fletcher D-Prize will award up to $20,000 to teams that can create a new organization that distributes DMPA-SC to women who otherwise wouldn't access this contraceptive option through a private last-mile network.

You must have a vision to grow quickly and serve at least 100,000 women within five years. Our award is meant to enable the first step toward this vision by supporting a small test pilot of the enterprise that helps anywhere from 100 to 500 women.

Designing Your Social Enterprise

There are 5 challenges that we think a successful organization must eventually solve. Your pilot should plan to focus on building and testing just a few of these pieces.

I. *How will your operations ensure women are introduced and educated on this contraceptive in a fair way?* We are seeking ideas that incentivize private providers to

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[6] PATH's DMPA-SC homepage includes much more descriptionwww.path.org/articles/dmpa-sc
[7]The *PATH Self-Injection Feasibility and Acceptability*memo summarizes and links to the two original studies in Uganda and Senegal. path.azureedge.net/media/documents/RH_Self_injection_Feasibility_Acceptability_fs.pdf
[8]Ibid
[9]$0.85 is the price given to FP2020 countries.
www.rhsupplies.org/fileadmin/uploads/rhsc/Tools/DMPA_Kit/Files/Handouts_for_decision_makers/DMPA-SC_advocacy_handouts_8_self-injection_2019.pd)

support self-injection. Many private providers will *discourage* self-injection, as they make money by charging an injection fee. We are seeking creative ways to motivate private providers to give women transparent information and education, so they may make their own autonomous choice.

A key challenge: your incentives must not lead to private providers pressuring women to self-inject. Please ensure your model follows the WHO and UNFPA produced *Ensuring human rights within contraceptive delivery: implementation guide*.

A successful pilot will see a 70-90% opt-in rate, comparable to controlled setting rates.[10]

II. *Once women opt-in, how will your organization ensure they are trained to correctly self-inject?* Existing training programs work, but are too expensive and slow to scale. Consider starting with PATH's 2018 best practice guide and training materials library. Also helpful are the original training programs from Senegal and Uganda studies, and PATH's user-training and provider training YouTube videos.

A successful program will see 90-98% of women correctly self-inject the first time with supervision, and then 88% with an unsupervised second dose three months later.[11] This observation checklist can guide you on how to measure "correct injection".

III. *After the first injection, how will your organization support women who wish to continue?* We are seeking creative, scalable ways to ensure women who wish to continue self-injecting do so. External factors can prevent women from continuing. A DMPA-SC continuation report notes that 25% of women stop because of a husband's disapproval, and 22% cite "forgetting". Another issue: women have generally preferred to purchase a full year's worth of doses at once, but high costs sometimes prevent this.[12]

A successful enterprise will see roughly 70-80% of women continue scheduled self-injections, comparable to rates in controlled studies.[13]

IV. *How will your organization avoid a medical waste problem at large scale?* Discarded needles will eventually become a problem. This is discussed in more detail in this lengthy 2019 *Evidence to Practice* report and PATH's 2011 waste management study.

A successful team will apply lessons from the existing research and its own creativity to

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[10] This range comes from the initial Senegal and Ugandastudies where 86% of women opted-in, with flexibility for a less controlled environment in a commercial roll-out.path.azureedge.net/media/documents/RH_Self_injection_Feasibility_Acceptability_fs.pdf

[11] Ibid

[12] See 2019 *DMPA-SC Evidence to Practice*meeting. path.azureedge.net/media/documents/DMPA-SC_E2P2_meeting_report-annexes_Eng_2019.pdf

[13] Continuation in the initial Senegal study was 72%, Uganda was 87%. Summary on continuation: path.azureedge.net/media/documents/PATH_DMPA-SC_self-injection_continuation_research_brief_English.pdf

solve the future waste management issue.

V. *How will you do all of the above in a way that can scale quickly?* An ideal Fletcher D-Prize organization will reach many women as fast as possible, in the cheapest way.

Time costs: the ability to reach women quickly is rooted in early program design. For example, at large scale, a program that trains providers with a 1 day training, or even an online platform, can roll out significantly faster than one using a 1 week training program.

Financial costs: fast-growing organizations capture strong economies of scale. We are less concerned with the cost to treat an average woman during the pilot, so long as that figure drops quickly as you grow.

Past programs are able to treat one woman for roughly $5. This covers costs to train providers, provide monthly support, and monitoring, and give providers materials to train women (but does not include administrative costs, demand generation, etc).

Market Conditions

Country selection: 19 countries currently allow self injection (see the map on page 10). Legality may differ within states, and laws are rapidly changing. We recommend checking that the regulations in your preferred operating area allow your work to proceed.

More resources. We have found PATH's website to be highly educational and helpful when considering executing DMPA-SC distribution. We recommend this private sector distribution webinar as a starting point.

Ready To Apply?

Download a First Round Application Packet and start creating your proposal at www.fletcher.tufts.edu/D-Prize.

Questions? Email Dorothy Orszulak at dorothy.orszulak@tufts.edu.