



## Evidence at-a-glance: What we know about subcutaneous DMPA, a novel injectable contraceptive

Evidence and experience with subcutaneous DMPA, or DMPA-SC,\* continue to grow. DMPA-SC is an innovative, easy-to-use injectable contraceptive that is administered under the skin rather than into the muscle. Data from pilot introductions, self-injection research, and other studies in many countries show incredible potential for DMPA-SC to expand contraceptive access, use, and choice for women and adolescent girls as part of a broad method mix.

All data in this brief refer to Sayana® Press—a DMPA-SC product that combines the drug and needle in a single device. Sayana Press is manufactured by Pfizer Inc. and is prefilled in the BD Uniject™ injection system.

### DMPA-SC is a highly effective and safe contraceptive option.

- ▶ DMPA-SC is 99 percent effective at preventing unintended pregnancy, when given correctly and on time every three months.
- ▶ DMPA-SC is safe to use for most women and adolescent girls, including women on antiretroviral therapy.

### Family planning providers and clients like DMPA-SC.

- ▶ Data from multiple countries, including Burkina Faso, Democratic Republic of Congo, Malawi, Nigeria, Niger, Senegal, and Uganda, suggest that DMPA-SC is highly acceptable to women (Tulane University; University of California, San Francisco [UCSF]; FHI360; PATH; United Nations Population Fund [UNFPA]).

\*DMPA stands for depot medroxyprogesterone acetate.



### Quick facts about DMPA-SC

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- **Three-year shelf life.**
- Available in more than **30 FP2020 countries**.
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## **DMPA-SC expands access for women and adolescent girls through channels closer to where they live: community, self-injection, and private sector.**



### **COMMUNITY**

- ▶ Pilot introductions in Madagascar, Uganda, and Senegal, and research in Democratic Republic of the Congo and Malawi, found that DMPA-SC can be administered successfully by community health workers (PSI, PATH, Tulane University, FHI 360).
- ▶ Evidence from a range of countries, including Burkina Faso, Niger, Senegal, Uganda, Mozambique, and Nigeria, show that DMPA-SC can reach new users of family planning (PATH/UNFPA, Population Services International, DKT/UCSF).



### **SELF-INJECTION**

- ▶ Self-injection studies from the Democratic Republic of the Congo, Ghana, Malawi, Senegal, and Uganda confirm that women can self-inject DMPA-SC with training and support and consider self-injection acceptable (Tulane University, Population Council, FHI 360, PATH).
- ▶ In Uganda, 33 percent of self-injectors reached through routine delivery in a pilot were first-time users of family planning, demonstrating the potential for self-injection to reach women who have never used contraception before. Self-injection also has the potential to reach young women and remote women; 56% of self-injectors were under the age of 25 and 41% lived far from health services (PATH).



### **PRIVATE SECTOR**

- ▶ Several countries, such as Bangladesh, Nigeria, Senegal, Uganda, and Zambia have introduced or piloted DMPA-SC in the private sector including clinics, pharmacies, drug shops, or social marketing efforts.

## **DMPA-SC can help improve contraceptive continuation, cost-effectiveness, and cost savings.**

- ▶ Recent studies from Uganda, Senegal, Malawi, and the United States countries found that, over a 12-month period, women who self-injected DMPA-SC continued using injectable contraception longer than those who received injections from providers (PATH, FHI 360, Planned Parenthood).
- ▶ Self-injection of DMPA-SC—when compared with clinic administration of traditional injectables—is not just cost-effective but cost saving. Self-injected DMPA-SC was shown to save up to \$1.1 million per year in Uganda, and \$350,000 per year in Senegal, when accounting for total costs to society, which include costs to both women and health systems (PATH).

### **From evidence to action**

The expanding body of evidence and experience with DMPA-SC can accelerate efforts to introduce and scale up this innovative contraceptive method globally. Evidence suggests that DMPA-SC is safe, effective, and highly acceptable, and that it can increase access and/or continuation for women and adolescent girls in their

communities and homes, including through self-injection. Policymakers can collaborate with researchers, implementers, and advocates in their own and other countries to ensure that evidence informs decision-making on a variety of areas, including:

- ▶ Policy development and implementation related to family planning, including DMPA-SC.
- ▶ National and subnational scale-up of DMPA-SC.
- ▶ Expansion of DMPA-SC through additional delivery channels.

**For more information on subtopics that may be of interest to specific audiences, see additional evidence spotlight briefs on acceptability, community-level distribution, self-injection, private sector, and research on the future of injectable contraception.**



**“It was easy to use. I like the size, and also it has a good needle.”**

—Adolescent girl,  
Uganda

## Evidence at-a-glance: Spotlight on acceptability of subcutaneous DMPA

### Family planning providers and clients, including young women and older adolescent girls, like DMPA-SC.

- ▶ In the Democratic Republic of Congo, a study of community-based distribution found that more than 90 percent of those who accepted DMPA-SC and were followed up three months later chose to receive a second injection (Tulane University).
- ▶ In Nigeria, more than 70 percent of users sampled have either continued to use DMPA-SC or say they plan to continue (University of California, San Francisco [UCSF]).
- ▶ In Senegal and Uganda, acceptability studies in 2012 found that 80 percent of women in Senegal and 84 percent in Uganda who received DMPA-SC said they would select it over intramuscular DMPA if both products were available (FHI 360).
- ▶ In Niger, Senegal, and Uganda, 44 percent of DMPA-SC doses administered during introduction were to women younger than age 25 years and 12 percent were to adolescent girls younger than 20 years (PATH/United Nations Population Fund [UNFPA]).



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**Community health workers are a proven source of family planning products and information, including injectable contraception (The High Impact Practices in Family Planning Initiative).**

## Evidence at-a-glance: Spotlight on community-level distribution of subcutaneous DMPA

**DMPA-SC can be administered successfully by community health workers (CHWs), a critical source of family planning products and information.**

- ▶ In Uganda, around 2,000 trained CHWs (called Village Health Teams in Uganda) administered all 130,000 doses of DMPA-SC during the pilot introduction between late 2014 and mid-2016 (PATH).
- ▶ Two studies in Burkina Faso and Uganda evaluating continuation of DMPA-IM and DMPA-SC found that continuation for both methods was longer among women served by community health workers in Uganda. Differences may also be driven by country contexts (PATH).
- ▶ In the Democratic Republic of Congo, 96% of women felt very comfortable with a community health worker performing the injection rather than a physician or a nurse (Tulane University).

**DMPA-SC can expand the options available to women who have never used contraception before—because it makes it easier to deliver injectable contraception through more remote channels.**

- ▶ In Burkina Faso, Niger, Senegal, and Uganda, a two-year pilot introduction reached 135,000 women who had never used family planning before (PATH/UNFPA).
- ▶ In Niger, where DMPA-SC was the first injectable contraception offered at remote health posts, 70 percent of doses administered were to new users of family planning at the outset of introduction (PATH/UNFPA).
- ▶ In clinics in Mozambique (Population Services International) and private outlets in Nigeria (DKT/UCSF), nearly one-third of DMPA-SC users were new contraceptive users.



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### The World Health Organization (WHO)

has made a strong recommendation for self-injection, stating that it should be made available as an additional approach to deliver injectable contraception and for self-care.

**“I don’t need to travel long distance. It is easy, safe, and gives me the freedom to manage it myself.”**

—Self-injection research participant, Uganda

## Evidence at-a-glance: Spotlight on self-injection with subcutaneous DMPA

### Women can self-inject DMPA-SC with training and support and consider self-injection acceptable.

- ▶ In Uganda and Senegal, studies found that nearly 90 percent of women could self-inject competently and on time three months after being trained, and 98 percent of women who tried self-injecting expressed the desire to continue self-injecting (PATH).
- ▶ In Uganda, a qualitative study found that many adolescents interviewed could envision trying self-injection themselves. However, some still preferred having providers administer injections due to factors like fear of needles or provider expertise (PATH).
- ▶ Also in Uganda, new approaches to integrating self-injection in family planning programs have been implemented and evaluated to help clarify best practices for Uganda and similar settings. The program yielded good self-injection competence, including among adolescents, and was highly acceptable to most clients and health workers (PATH).
- ▶ In Ethiopia, women who participated in a qualitative study valued the time and expense that could be saved through self-injection. Most women who had initial concerns about their ability to self-inject changed their minds after they saw a product demonstration (PATH).



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### Self-injection can help improve contraceptive continuation

- ▶ In Uganda, Senegal, Malawi, and the United States, four studies found that over a 12-month period, women—including young women—who self-injected DMPA-SC in their own homes or communities continued using injectable contraception longer than those who received injections from providers (PATH, FHI 360, Planned Parenthood).

#### Data on self-injection from high-income countries

In Pfizer Inc.'s original clinical trials of Sayana® (DMPA-SC in a pre-filled glass syringe) and self-injection research in the United States and Scotland, there were no pregnancies among women practicing self-injection, and nearly all reported it to be convenient and easy (Pfizer Inc.; Baylor College of Medicine and Columbia University; Planned Parenthood; Chalmers Sexual and Reproductive Health Service). As noted above, a recent US study comparing one-year continuation of DMPA-SC between women randomized to self-injection versus clinic administration, found that continuous use was 69% in the self-injection group and 54% in the clinic group ( $p=.005$ ) (Planned Parenthood).

For more information, see the advocacy handout “Self-injected subcutaneous DMPA: A new frontier in advancing contraceptive access and use for women”.



**Drug shops and pharmacies** are a promising source of family planning products and information, including injectable contraception (The High Impact Practices in Family Planning Initiative, WHO).

## Evidence at-a-glance: Spotlight on private-sector provision of subcutaneous DMPA

**DMPA-SC may be an appropriate option for pharmacies and drug shops, as well as social marketing initiatives.**

- ▶ In Nigeria, DKT International led private-sector introduction of DMPA-SC in 2014: the first commercial offer in Africa, including through pharmacies (DKT Nigeria). The MOH has also allowed patent and proprietary medicine vendors to stock DMPA-SC and is exploring potential for them to administer DMPA-SC and initiate self-injection clients.
- ▶ In Bangladesh, since 2015, the Social Marketing Company has introduced DMPA-SC in 6,000 pharmacies and conducted marketing campaigns to generate demand (SMC).
- ▶ Kenya is poised to roll out administration of injectable contraceptives by pharmacists, following the update of national family planning guidelines and a training curriculum for pharmacists.
- ▶ In Senegal, the social marketing organization ADEMAs has begun to offer the product through pharmacies (ADEMAS).
- ▶ Uganda is moving toward officially authorizing administration of DMPA-SC and DMPA-IM in pharmacies and accredited drug shops. DMPA-SC is being offered in select pharmacies, drug shops, and clinics on a pilot basis (FHI 360, PATH).
- ▶ In Zambia, self-injection was introduced through a pilot study with private health providers in 2018-2019. This demonstrated that a shorter training was effective for private providers and clients, and that most pilot participants are willing to pay a price similar to or higher than the negotiated donor unit price of \$.85 (John Snow, Inc.).



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