Evidence at-a-glance: What we know about subcutaneous DMPA, a new type of injectable contraception

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, 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]).

Quick facts about DMPA-SC (Sayana® Press)

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'DMPA stands for depot medroxyprogesterone acetate.
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 Uganda and Senegal, and a research study in Democratic Republic of Congo, found that DMPA-SC can be administered successfully by community health workers (PATH, Tulane University).

▶ 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 Uganda and Senegal confirm that women can self-inject DMPA-SC with training and support and consider self-injection acceptable (PATH).

PRIVATE SECTOR

▶ Several countries, such as Bangladesh, Nigeria, and Senegal, have successfully introduced DMPA-SC through pharmacies and drug shops, and other social marketing efforts.

Studies in progress will provide additional information about the potential of DMPA-SC to increase contraceptive access.

▶ Studies underway in Burkina Faso, Malawi, Senegal, and Uganda are exploring topics such as contraceptive continuation—for example, whether women will use DMPA-SC longer than traditional intramuscular (IM) injectables, or whether women who self-inject continue longer than women who receive injectables from providers. Studies are also assessing relative costs of DMPA-SC (including self-injection) and DMPA-IM, and approaches to integrating self-injection into national family planning programs. Results are anticipated in 2017–2018 (PATH, FHI360).

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 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 sheets on acceptability, community-level distribution, self-injection, private sector, and research on the future of injectable contraception.
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 recent 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]).

“\text{It was easy to use. I like the size, and also it has a good needle.”} \\
\text{—Adolescent girl, Uganda}
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).
▶ When both DMPA-SC and DMPA-IM are available from CHWs, DMPA-SC tends to make up the majority of injectables administered: 72 percent in Senegal and 75 percent in Uganda (PATH).
▶ In the Democratic Republic of Congo, 97 percent of research participants who received DMPA-SC from medical or nursing students through community-based distribution said they were very comfortable receiving the injection that way (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.

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

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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, a recent study 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).

▶ Also 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).

▶ 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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Data on self-injection from high-income countries

In Pfizer Inc’s original clinical trials of Sayana® (DMPA-SC in a prefilled 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.

The World Health Organization (WHO) recommends self-administration of subcutaneous DMPA products in circumstances where family planning clients have training and support.

“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

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

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

- In Nigeria, DKT International led private-sector introduction of the product in November 2014, marking the first commercial offer in Africa, including through pharmacies (DKT Nigeria).
- In Bangladesh, since February 2015, the Social Marketing Company (SMC) has introduced DMPA-SC in 6,000 pharmacies and conducted marketing and mass media campaigns to generate demand (SMC).
- In Senegal, the social marketing organization ADEMAS has begun to offer the product through pharmacists (ADEMAS).
- Uganda is on the verge of officially authorizing administration of DMPA-SC and DMPA-IM in pharmacies and accredited drug shops (FHI 360).

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).

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Evidence at-a-glance: Research on the future of injectable contraception

While evidence on DMPA-SC is growing, some questions are still unanswered. For example, it’s still unknown whether women will generally use DMPA-SC longer than traditional DMPA-IM due to its unique attributes, such as ease of use and access, shorter needle, and lower dose. It is also unknown whether the method—either through regular delivery channels or self-injection—reduces costs.

Studies in progress in Burkina Faso, Malawi, Senegal, and Uganda will help address these unknowns, with results anticipated in 2017–2018.

- In Burkina Faso and Uganda, studies are exploring whether women who receive DMPA-SC injections from clinic providers (Burkina Faso) or community health workers (Uganda) continue using injectable contraception longer than women who receive DMPA-IM from the same types of providers. They also assess relative costs of each method (PATH).

- In Malawi, research is exploring whether women who self-inject DMPA-SC continue using injectable contraception longer than women who receive DMPA-SC from either clinic or community providers. The study also examines whether pregnancy rates or side effects differ between the two groups (FHI 360).

- In Senegal and Uganda, studies are examining whether women who self-inject DMPA-SC continue using injectable contraception longer than women who receive DMPA-IM from clinic providers and what the relative costs are (PATH).

- In Uganda, new approaches to integrating self-injection in family planning programs are being implemented in 2017 and will be evaluated to help clarify best practices for Uganda and similar settings. Results of this work are anticipated in 2018 (PATH).

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