New injectable overcoming old barriers

Unmet need for contraception remains high in Nigeria. In 2017, an estimated 26% of women who wished to use contraception were unable to access it.\(^1\) While access to contraceptive methods and reproductive health services has improved, modern contraceptive prevalence is only 14.7%—well short of Nigeria’s national goal of 27% by 2020.\(^1\)

Introduced in South West Nigeria in 2015, DMPA-SC (brand name Sayana© Press) is an all-in-one injectable contraceptive designed for easy, subcutaneous (SC) administration. With a shorter needle and a prefilled dispensing mechanism, advanced health training is not required for safe administration, thus enabling lower-skilled health workers to deliver the method, and thereby increasing access to contraception. During introduction of DMPA-SC in 2015-2016, many users and providers expressed positive overall experiences with the product, expressing favorable views of the small needle, the ease of administration, and reduced side effects.

Scaling up DMPA-SC in Nigeria

In late 2016, distribution of DMPA-SC was expanded throughout the country (Figure 1) and made available through both public and private health providers. DKT Nigeria, a social marketing private sector distributor of contraceptives, focused on distributing through high volume contraceptive service health facilities and drugs shops in 14 states. In the public sector, under the coordination of UNFPA and implemented by three local NGOs (Action Health Incorporated, Association for Reproductive & Family Health, and the Planned Parenthood Federation of Nigeria), community-based distribution from primary health centers delivered DMPA-SC to women in targeted localities in 10 states.

Product distribution 97% of surveyed users were satisfied with their DMPA-SC experience

Through the end of 2017, 1.3 million units of DMPA-SC have been distributed through UNFPA and DKT Nigeria efforts:

- Distribution was highest in the South West, especially in Lagos and Oyo.
- Nearly 11,000 providers have been trained to counsel on and administer DMPA-SC.
- DMPA-SC is now available in all six geopolitical zones of Nigeria and in nearly all state capitals.

Reaching new users

The program reached many new users of modern contraception (Figure 2), suggesting that adding DMPA-SC to the method mix offered is expanding women’s contraceptive options in Nigeria.

Reaching new users
Monitoring and Evaluation was conducted to identify lessons learned that could inform future program scale-up.

Objectives:
- Track and compare key performance indicators across geographies and sectors
- Assess product uptake and experience among DMPA-SC users

Findings were synthesized from multiple data sources:
1. Program reports and documents, submitted and assessed on a quarterly basis
2. UNFPA daily patient register database, which contained records for 161,467 women, of whom 80.5% received DMPA-SC
3. A phone survey with a convenience sample of 459 DMPA-SC users: 235 reached by UNFPA, 224 reached by DKT Nigeria
4. In-depth interviews conducted with DMPA-SC stakeholders to explore the implementation of DMPA-SC self-injection

Data collection and synthesis was conducted by the University of California, San Francisco and Akena Associates in Nigeria

Who is using DMPA-SC?
Among women reached for a phone survey, DMPA-SC users were found to more likely to be older, married, wealthier, and better-educated compared to the general population.
- 89% of users were aged 25 or older
- 91% were currently married
- 85% had at least a secondary education
- 73% were currently working
- 91% were from richest two wealth quintiles

DMPA-SC awareness generation
Most surveyed women learned about DMPA-SC either through a friend/family member or a provider (Figure 3).

Why choose DMPA-SC?
Recommendations from providers and ease of use were the most commonly cited reasons for choosing DMPA-SC.
- Women who used private providers more commonly reported that the provider’s recommendation was the main reason.
- Among women attending public providers, ease of use was the most commonly cited reason for choosing DMPA-SC.
- The most frequently mentioned reasons for switching from other methods were related to perceived lower side effects with DMPA-SC, provider recommendations, and wanting a more effective method.

Quality of care
Surveyed DMPA-SC users attending private providers experienced higher overall quality of care than those attending public providers.
- Women who received care in the public sector were less likely to be asked if they experienced side effects with other methods, if they had existing health issues, or be told about possible effects of DMPA-SC.
- Women at private providers were more likely to report feeling treated differently due to marital status and that providers had a moderate-to-strong preference for what method she should use.

User satisfaction and willingness to pay
Among surveyed women, satisfaction with DMPA-SC and providers was very high. Nearly all survey respondents said that they were satisfied with the product and were planning to continue with another injection.

Most women also reported that they would recommend DMPA-SC to a friend.

Over 80% of respondents attending private providers and 65% of respondents attending public providers reported that they would be willing to pay for their next injection.
Growing interest in self-injection

In 2017-2018, a third of women surveyed expressed interest in learning to self-inject DMPA-SC (Figure 4). This increased from 22% of surveyed women in 2015-2016.

Figure 4. Interest in self-injection

<table>
<thead>
<tr>
<th>Option</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>29%</td>
</tr>
<tr>
<td>Maybe</td>
<td>4%</td>
</tr>
<tr>
<td>No</td>
<td>67%</td>
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</tbody>
</table>

Most women interested in self-injection were confident they could administer the injection and that the procedure seemed easy. Many also indicated they would feel more comfortable if someone showed them how to perform the procedure.

Self-injection in practice

The unique injection system of DMPA-SC, complete with a smaller needle, can enable some women to inject themselves. Self-injection with DMPA-SC would reduce the need to seek care from a trained health worker and has been found to be more cost-effective than administration by a provider.\(^2\)\(^,\)\(^3\) Thus, self-injection could further increase access to contraception for underserved women.

In other African countries, DMPA-SC self-injection has been introduced and studied across several distribution channels.

- Feasibility studies in Uganda and Senegal showed that women could competently self-inject on time three months after training.\(^2\)\(^,\)\(^3\)
- In Malawi, a randomized control trial of 731 women at public health clinics found that the 12-month continuation rate was 28 percentage points higher among self-injection users (73%) than among provider-administered users (45%).\(^4\)
- An effectiveness study in Uganda found 12 month continuation rates were 81% for self-injection group and 65% for the provider-administered group.\(^5\)
- Forthcoming results from Senegal indicate that 12-month continuation rates for self-injecting women were significantly higher than for women receiving administered injections.\(^6\)

Planning for self-injection in Nigeria

Self-injection is being considered as a viable strategy in the national plan for DMPA-SC. The DMPA-SC Accelerated Introduction and Scale up Plan (2018-2022) includes plans for the progressive rollout of self-injection across all states.

Synthesizing feedback from experts and stakeholders, a series of key challenges will need to be evaluated before implementing self-injection on a wide scale:

- **Ensuring access to consumer education:** How will self-injection be made known to potential users? What kinds of messaging will be permitted that will be effective? How will women obtain information about side effects, safety, and proper injection?
- **Ensuring equitable access to self-injection:** How do we ensure competency in practice and prevent providers from imposing their own restrictions on allowing women to self-inject?
- **Combatting provider disincentives:** How do we address the disincentives that some providers (mainly among private for-profit providers) may face by allowing women to self-inject rather than be administered for a fee?
- **Deploying community-based distribution effectively:** What will distribution in communities and outside facilities look like in the context of self-injection? Where can it make the most difference for reaching underserved women?
- **Monitoring safety and quality assurance:** How can we coordinate with existing monitoring mechanisms to ensure optimal practice, particularly in the private sector?

Recommended next steps for managing the rollout of self-injection and maximizing learning

- **Encourage adaptive state-by-state implementation** models to test different approaches in different contexts.
- **Standardize monitoring and evaluation** feedback to document best practices and lessons learned, and enable programmatic course correction.
- **Align communications and messaging** to create materials that highlight progress and stay ahead of misinformation.
Challenges with DMPA-SC implementation

- **Reaching young women:** Most programs were unable to deliver more than 10% of services to younger women under age 25.
- **Sustaining community-based distribution:** Cost-recovery was limited in the private sector model; extensive resource commitments are needed for continued public sector delivery.
- **Ensuring continuous supply:** Stockout events delayed implementation and hampered distribution momentum.
- **Lack of user data from private providers:** No standardized information on client utilization was available.
- **Little coordination across sectors:** Opportunities for mutually-beneficial collaboration between public and private service delivery were missed.

Lessons learned

**High variation in performance between states**

Even within a given geopolitical region, there was high variation in distribution achieved. Continued M&E activities and information sharing across regions will help explain the factors that contributed to differences in program success and facilitate the expansion of locally-applicable best practices.

**Special strategies for reaching younger women**

While fewer younger women were reached compared to older women, some UNFPA implementers deployed strategies that enabled them to reach a higher proportion of younger women than others. These strategies included: (a) conducting formative research with young women to inform outreach strategies; (b) screening providers to exclude those biased against youth contraceptive use; and (c) recruiting younger volunteers to assist with outreach and distribution.

**Social marketing on digital platforms to reach youth**

Through their website, Facebook page, and other digital platforms, DKT Nigeria is responding to an increasing amount of inquiries from people seeking information about reproductive health, including accessing contraceptive services and DMPA-SC. These communications channels have been especially popular among young people who often face stigma when seeking sexual and reproductive health services.

Community-based distribution (CBD) for underserved women

Through the UNFPA public sector program, delivering DMPA-SC outside of facilities through proactive, community-based distribution was effective for reaching underserved women. Among strategies used, in areas with more conservative cultural norms, door-to-door outreach enabled women, who may face restrictions on leaving their home, to access DMPA-SC.

**Effectiveness of individual packaging**

In 2017, DKT Nigeria began repackaging DMPA-SC into individual doses. Early feedback has been positive. Individual packets have encouraged private providers to stock DMPA-SC in quantities that better suit their needs.

**Looking ahead**

Including DMPA-SC in the contraceptive method mix may help to reduce unmet need for contraception and accelerate progress toward Nigeria’s reproductive health goals. DMPA-SC is attractive to new users, positive word-of-mouth is strong, providers like the product, and through digital media, CBD, and self-injection, there is potential to create new pathways for reaching underserved women. As DMPA-SC expands, future programs should consider the following:

- Recording and sharing best practices across geographic and cultural contexts
- Clarifying the regulations and implementation plan for DMPA-SC self-injection
- Adapting community-based distribution for sustainability and effectiveness in reaching underserved women

**References**