Over the past decade, Senegal has been a leader in introducing and scaling up Subcutaneous DMPA (DMPA-SC) and self-injection. To expand contraceptive options for women, Senegal is working to ensure widespread access to DMPA-SC at all levels of the health system, including through social marketing organizations, pharmacies, and community-based distribution. The Ministry of Health (MOH) has advanced self-injection through evidence generation, policy change, and innovative training approaches, also resulting in scale-up of DMPA-SC.

Introduction and scale-up of DMPA-SC in Senegal

Senegal’s early progress on DMPA-SC introduction was rooted in a growing evidence base on women’s contraceptive preferences. The first acceptability studies for DMPA-SC were conducted in Senegal and Uganda from 2012 to 2013. In Senegal, results showed that when given a choice between two injectable contraceptives, 70 percent of women chose DMPA-SC over intramuscular DMPA. Three months later, DMPA-SC was preferred by even more of these women (80 percent), who cited fewer side effects, fast administration, less pain, and method effectiveness. The study also found that DMPA-SC could be safely integrated into family planning programs and administered by trained community-based providers. In 2014, the MOH released a circular announcing its approval of community-based distribution of injectable contraceptives.

Building on these encouraging results, the MOH drafted a national introduction plan, and in early 2015 launched a pilot to introduce DMPA-SC at all levels of the public-sector health system in 4 of the country’s 14 regions. Access to the product increased and it reached new users—DMPA-SC was the first modern contraceptive method used by 24 percent of clients, and more than one-third of users were younger than 25 years. After the pilot ended in 2016, based on this evidence, the MOH approved scale-up of DMPA-SC and rolled out training for health care providers across the country. Since 2017, DMPA-SC has been offered at all levels of the public health system, in private clinics, and in community health huts, as well as sold through private-sector pharmacies.

Senegal’s self-injection journey

As DMPA-SC was being piloted and scaled up across the country, the MOH and partners were simultaneously building the evidence base for self-injection. A 2015–2016 study demonstrated that self-injection is both feasible and acceptable to women when they are trained and counseled by a health care provider. Nearly 90 percent of the participants in Senegal were proficient in self-injection three months post training, and 93 percent said they wanted to continue to self-inject. The following year, a continuation study found that self-injection may support women to continue using injectable contraceptives longer than injections from providers.

Based on this evidence, the MOH officially authorized self-injection in 2018. The MOH and partners then held a workshop to plan for national scale-up of self-injection, including health care provider training. Additionally, in 2019 the national regulatory authority approved a label update for DMPA-SC to include self-injection, providing the legal basis for use of DMPA-SC as a self-administered product and reinforcing the MOH’s programmatic decision to roll out self-injection.

National scale-up of self-injection is underway. The MOH integrated self-injection indicators into their District Health Information Software 2 (DHIS2) in January 2020. As of December 2021, more than 2,600 providers in seven regions had been trained to offer self-injection to family planning clients. The national health information system has reported that 59 percent of public service delivery points offer self-injection, including all public facilities in Dakar and Thiès, the two most populous regions of the country.

Contraception in Senegal at-a-glance

- Modern contraceptive prevalence rate (mCPR) for married women aged 15 through 49 years: 26%.
- Injectables share of the modern method mix: 38%.

Source: 2017 Senegal Demographic and Health Survey.

Family Planning 2020 goal

- Increase CPR from 21% in 2015 to 45% in 2020 by reducing unmet need from 25% to 10%. As of 2020, the mCPR for all women was 19.8%, and unmet need for married women was 22.4%.

Government leadership and willingness to innovate

Senegal’s progress is due in part to supportive leadership within the MOH, as well as the commitment of donors to ensure DMPA-SC and self-injection are brought to full scale. Current and former ministers of health have demonstrated high-level support for task-sharing and innovation in new contraceptive product introduction, including DMPA-SC and self-injection. The former maternal and child health (MCH) director, for example, was recognized internationally with an Excellence in Leadership for Family Planning Award at the 2013 International Conference on Family Planning. In addition, the MOH extended its support for self-injection to self-care more broadly, elevating World Health Organization–recommended approaches that place people at the center of their own health decisions. And the MOH and PATH launched an advocacy group, the Self-Care Pioneers Group, to develop and advance national self-care guidelines.

In addition, the MOH has leveraged support from donors to champion innovative approaches to training—a significant cost driver in any scale-up plan—including cascaded training in Dakar and Thiès and eLearning in another five regions (see “Innovation spotlight” to the right). Public health care providers in the seven regions where rollout has begun are being oriented to the eLearning platform to close remaining training gaps. eLearning shows promise for scaling up self-injection in the private sector as well, an approach that Uganda has employed for training pharmacists and drug shop staff.

Challenges on the road to scale-up

Despite Senegal’s many successes in DMPA-SC scale-up, the MOH and partners have had to overcome several challenges. Coordinating introduction of a new product or intervention—and the various partners, projects, and sectors involved—is universally complex for ministries of health. In Senegal, irregularity of technical working group meetings that convened all family planning partners and donors contributed to periods of slowdown, resulting in a delay between launch of the self-injection scale-up plan and development of operational guidance. This guidance was needed to move training forward and to finalize other programmatic recommendations related to waste disposal and how many units to give clients to take home.

Another barrier that exists to full national coverage is lack of a policy that permits pharmacists to administer injectable contraceptives. For women seeking advice on their health, pharmacies are regularly a first point of contact, because they are often more accessible, confidential, and faster than visiting a clinic. A 2019 study to assess the feasibility of pharmacist administration of injectable contraceptives found that pharmacy personnel could provide family planning counseling and administer injectables with additional support to improve the quality of counseling (e.g., on-site training, a private room for client counseling). Study authors recommended that the country explore building a legal framework to allow private pharmacies to offer injectables and establish systems to support their high-quality provision, such as appropriate training approaches, capacity-building strategies, and a supervision and quality assurance system. These results and recommendations will be used to advocate for this policy change.

An additional challenge lies in the current self-injection operational guidelines, which require clients to make an initial purchase of a total of five DMPA-SC units (doses): one unit for demonstration, one for practice, one for the supervised self-injection, and two to take home. This means clients are paying five times the cost of a provider-administered injection. Some women may choose not to self-inject DMPA-SC because they lack financial means to purchase multiple units for training purposes as well as home use.

Innovation spotlight

Rollout and evaluation of a self-injection eLearning course

In mid-2020, Senegal became the first Francophone country to widely roll out an eLearning course on DMPA-SC self-injection, successfully training more than 500 health workers across five geographic regions that are home to 30 percent of the country’s population. While the course had been developed by the Access Collaborative prior to COVID-19, the pandemic restrictions on travel and in-person gatherings and trainings underscored the importance of using innovative and digital approaches to reach health workers.

Through mid-2020, the Access Collaborative supported rollout and evaluation of this course, which is used in training both facility- and community-based health workers to counsel clients on self-injection. Senegal’s eLearning approach consists of two phases:

- Completion of an online course.
- Post-training supervision visits from the MOH (and supported by Access Collaborative) to assist the trainees in practical application of theoretical learning through demonstration overseen by an experienced self-injection supervisor.

An evaluation led by the Access Collaborative assessed the feasibility of the eLearning approach, and the results showed that health workers prefer eLearning or a blend of online and in-person learning; ease of enrollment for an eLearning course significantly influences participation, and registration job aids are helpful; eLearning has associated in-country costs, but efficiencies are possible; and eLearning costs are substantially lower than the costs of on-the-job training approaches. Two recommendations on how to use or adapt the eLearning course going forward came from this study: (1) post-training supportive supervision is instrumental for provider preparedness to offer DMPA-SC and self-injection counseling and (2) alternate approaches should be considered to support providers who are unable to adjust their workload to take the course.
Self-injection rollout was also delayed by lack of dedicated funds for training providers in self-injection counseling. In mid-2019, however, PATH deployed Catalytic Opportunity Funds from the Clinton Health Access Initiative to support low-cost, short-term opportunities to accelerate DMPA-SC scale-up. This grant enabled the training of more than 2,000 providers in Dakar and Thiès.

**Key lessons and factors for success**

1. **Thorough planning and preparation help mitigate impediments.** While national scale-up plans outline a vision for theoretical implementation, periodic slowdowns are expected in any project. Lack of funding, weak coordination, or changes in MOH leadership can present obstacles that are more readily overcome when detailed plans are in place. The arrival of COVID-19 in mid-2020 led to delays in expected project timelines. The Access Collaborative team used these periods to prepare contractual documents, study protocols, and tools; advance communications and training, including the eLearning course; and position for activities to roll out smoothly when momentum picked up.

2. **Funding for operational activities can enable progress of country-led plans.** Given strong donor and partner support from the Bill & Melinda Gates Foundation, the Catalytic Opportunity Fund, and the US Agency for International Development–funded Neema project to achieve national scale-up of self-injection, Senegal’s plan was funded at 93 percent as of April 2020, the highest proportion of funding as compared to other countries where the Access Collaborative works. Where discrete funding for scale-up is not available, it is essential to carefully examine ways that DMPA-SC provider training can be integrated into existing training plans by the MOH or nongovernmental organization partners.

3. **High-level leadership is essential for both introduction and encouraging innovative approaches.** Having strong ministry-level leaders and committed stakeholders has been key to the success of self-care, self-injection, and eLearning. Strides in these areas in Senegal were facilitated by supportive leadership at the MCH Directorate level, particularly through support for the early self-injection acceptability studies, and later for national scale-up. Close engagement with the MCH Directorate contributed to wide dissemination of self-injection study results, early integration of self-injection indicators into DHIS2, and subsequent smooth rollout of provider training in self-injection.

4. **Supervision of health workers ensures high-quality service when introducing new methods.** Post-training supervision, conducted several weeks after health worker training, proved critical for monitoring provider practices, giving feedback, making course corrections, and ensuring the quality of service provision. For example, during supervision visits following provider self-injection training in Thiès and Dakar Regions, the Access Collaborative found that despite technical knowledge, many providers needed encouragement and positive reinforcement before they felt confident offering the option of self-injection to their clients. In addition, the COVID-19 pandemic confinement period presented challenges for in-person supervision, as regional medical staff had to engage in pandemic response work and, later, ensure safe conditions for re-opening of public schools. Virtual supervision approaches hold promise in this regard, and merit piloting and evaluating to assess effectiveness in the future, in Senegal as in other country settings.

### Key policies and actions in support of DMPA-SC introduction in Senegal

- 2012: National Family Planning Action Plan 2012–2015 is developed
- 2014: MOH authorizes community-based delivery of injectable contraceptives
- 2018: MOH issues a circular authorizing self-injection
- 2018: National scale-up plan for self-injection of DMPA-SC is launched
- 2019: National drug authority approves self-injection

### The way forward in Senegal

Monitoring and evaluating new approaches will continue to inform policy and implementation work—and provide learning data for other countries. Results from evaluation of the self-injection providers eLearning training course provide insight into what does and does not work well using this approach, and for whom. Through dissemination workshops and webinars organized by the Access Collaborative, the results have informed Senegal stakeholders, as well as other countries.

A policy goal on the horizon in Senegal includes permitting pharmacists to deliver injectable contraceptives and to initiate clients on self-injection. The Access Collaborative’s group of “ambassadors” who advocate for self-injection supports movement toward this goal. These self-injection ambassadors serve as resources on self-injection best practices, share evidence to inform policy change, and connect stakeholders with technical assistance from the collaborative as needed. This work dovetails with ongoing work in Senegal to champion self-care approaches as an important means to expand autonomy and access within reproductive health care services.

### References


2. PATH. Monitoring the introduction of subcutaneous DMPA (DMPA-SC) [fact sheet]. Seattle: PATH; 2018.


About the DMPA-SC Access Collaborative

The PATH-JSI DMPA-SC Access Collaborative provides data-driven technical assistance, coordination, resources, and tools to ensure that women have increased access to DMPA-SC self-injection as part of an expanded range of contraceptive methods, delivered through informed choice programming.
DMPA-SC and self-injection scale-up timeline for Senegal

2012: First acceptability study
2013: National DMPA-SC introduction plan drafted
2014: MOH authorizes community-based distribution of injectable contraceptives

2015: Pilot to introduce DMPA-SC at all levels of the public sector health system
Self-injection feasibility and acceptability study

DMAP-SC scale-up underway

2016: Self-injection study

2017: MOH approves self-injection

2018: First multi-country meeting (E2P)

2019: Second multi-country meeting (E2P2), Dakar

2020: First provider training in self-injection outside of pilot self-injection scale-up underway

Percent of active SDPs:
Public: 77%
Private: 70%

Percent of public-sector SDPs active in self-injection: 68%

Self-Injection
DMPA-SC
Access, Collaborative-related event

Abbreviations: E2P, Evidence to Practice; MOH, Ministry of Health; SDP, service delivery point.