

Pathways of Change:

How DMPA-SC Introduction may Impact a National Family Planning Program

Introduction

DMPA-SC, currently sold by Pfizer as Sayana Press, is a new all-in-one injectable that has been heralded as a possible “game changer” for family planning due to its easy administration by paraprofessionals or even clients themselves.ⁱ After almost three decades of product development, research, and introduction, there are over a dozen countries looking to pilot new or scale up existing DMPA-SC service delivery approaches. Research has shown it is highly acceptable, with providers and clients reporting a preference for DMPA-SC over DMPA-IM.ⁱⁱ Early introduction studies hint at the possibility of perceived or real lower side effects, which are a major determinant of method satisfaction and continuation.ⁱⁱⁱ DMPA-SC represents an important technological advancement of injectable contraception and may eventually replace DMPA-IM completely.

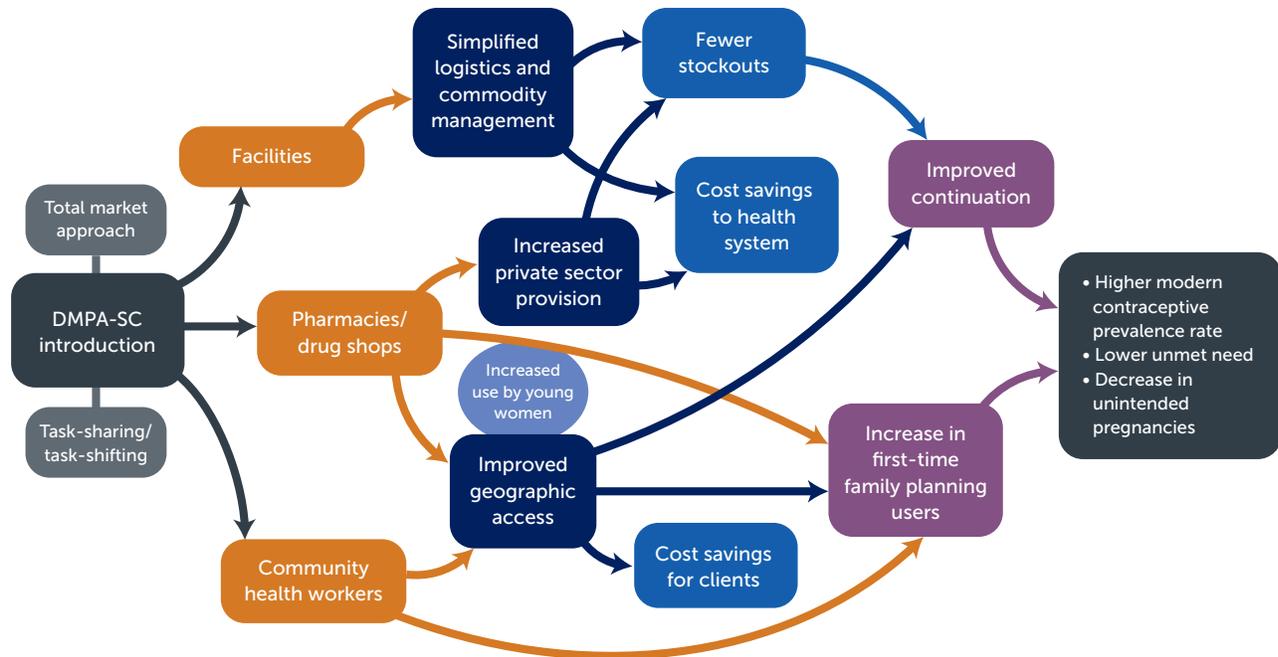
Yet for all its method advantages and posited game changing, it is worthwhile for the family planning community to examine exactly **how** and **through what mechanisms** we can expect DMPA-SC to have a programmatic impact. Changing the status quo is challenging and brings up-front costs for provider training, client education, and changes to procurement and distribution systems. Adoption of DMPA-SC also requires advocacy, policy and regulatory changes, and in the case of home and self-injection, additional layperson training. Many decision-makers and

gatekeepers will need to see clear benefits before supporting DMPA-SC introduction or scale-up in their country.

Potential Pathways of Change

The Health Policy Plus (HP+) project, funded by the U.S. Agency for International Development, is developing a theoretical framework on what might result from adding DMPA-SC to a national family planning method mix (see Figure 1). This theoretical framework or “pathway of change” begins with looking at different avenues of service delivery—facilities, community health workers, and pharmacies or drug shops. Generally, facilities are assumed to already be providing DMPA-IM and, as such, the added value of DMPA-SC introduction there is limited, but some benefits might be realized from simplified logistics. Provision of DMPA-SC alongside existing DMPA-IM at service delivery points is assumed to not garner many cost efficiencies or public health impact. Rather, it is likely that the greatest impact will result when DMPA-SC introduction is nested within two other key policy efforts—task-sharing and a total market approach. Harnessing the simpler administration feature of DMPA-SC to expand access through community health workers and drug shop owners, or through retail approaches that allow women to self-administer, could yield additional opportunities to

Figure 1: Pathways of Change: How DMPA-SC Introduction Can Influence Contraceptive Use



expand access and increase social marketing and private sector engagement.

HP+’s theoretical framework highlights the assumed outcomes and impact of these pathways to suggest potential cost savings for clients and the health system, as well as an increase in modern contraceptive prevalence rate and decrease in unintended pregnancies.

Modeling Impacts from DMPA-SC Introduction and Scale-Up

Through modeling, HP+ is quantifying the changes a country might experience through DMPA-SC introduction and scale-up. Modeling is a useful way to present possible future outcomes of current trends and policy decisions. By using existing data and defining different scenarios, modeling can help project the implications of actions today on desired outcomes in the future. The DMPA-SC introduction model is an Excel-based tool that can be customized to specific country contexts. It can:

- Estimate gains in the modern contraceptive prevalence rate that are expected from DMPA-SC introduction

- Disaggregate results by level of health system (points of service), as well as by public versus private sector
- Explore the potential impact of DMPA-SC introduction on the use of family planning by young people, who may prefer to obtain family planning commodities at non-traditional outlets such as drug shops^{iv}
- Estimate the impacts of a system-wide replacement of DMPA-IM with DMPA-SC, or from DMPA-SC occupying a niche within the total injectables market

The model shows how improved access is a key driver of public health gains, especially through community-based distribution and the private sector. As such, the health system context—especially the size of health networks and the degree to which they already offer injectables—greatly impacts the potential of DMPA-SC to contribute to improved family planning outcomes in a country, including its contribution toward helping a country meet its FP2020 goals of increasing access to voluntary, rights-based contraception for women and girls.

The modeling tool is paired with an Excel-based multipronged economic analytic approach to capture the cost dimension of introducing DMPA-SC into the family planning program. This tool allows decision-makers to look at how family planning program costs might vary under different scenarios of DMPA-SC introduction and scale-up. This economic analysis takes into account changes in method mix as well as cost characteristics of DMPA-SC and other family planning methods to:

- Explore cost savings from shifting injectable points of service from facilities to those closer to home, such as through community health workers or pharmacies/drug shops
- Quantify reduced opportunity costs and efficiency gains for clients when they obtain injectables within the community and/or adopt self-injection
- Explore cost savings from increased community-based distribution and client purchases at pharmacies and drug shops for self-injection, thus reducing the number of visits to public health facilities
- Quantify reduced opportunity costs for clients associated with travel and time spent at facilities
- Compare how reduced in-country supply chain, inventory management, and waste disposal costs from smaller and lighter packaging will potentially offset higher commodity costs
- Provide estimates on start-up costs of national introduction and scale-up
- Project savings and investment costs to generate return on investment estimates

Country Application

Stakeholders considering DMPA-SC introduction or scale-up have several questions about the potential benefits and costs. These include:

- How will introducing DMPA-SC affect the method mix and modern contraceptive

prevalence rate? Does this impact differ in a country with a higher modern contraceptive prevalence rate, where DMPA-IM already occupies about half the modern method mix, compared to a country with a low modern contraceptive prevalence rate, where injectables are only a third of the modern method mix?

- What if DMPA-SC introduction is coupled with policy changes that allow pharmacists to administer or allow women to purchase from multiple public and private vendors (such as facilities, drug shops, or community health workers) to self-inject? What can be gained under these circumstances?
- What are the cost implications if DMPA-SC is provided at select service delivery points (such as through community health workers) or eventually replaces DMPA-IM completely?

Modeling can help stakeholders generate quantifiable answers to these and other questions, and will help decision-makers assess what related policy changes (for example, task-sharing and total market approach) might be required alongside DMPA-SC in order to fully realize its benefits.

HP+ is seeking countries interested in piloting the DMPA-SC introduction model using their country-specific data and health system scenarios. If you are working with key national family planning stakeholders considering DMPA-SC introduction or scale-up, this model may help you generate estimates of quantifiable changes that can be used for evidence-based decision-making.

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References

- i Spieler, J. 2014. "Sayana Press: Can it be a 'Game Changer' for Reducing Unmet Need for Family Planning?" *Contraception* 89: 335–338.
- ii Burke, H.M., M.P. Mueller, B. Perry, C. Packer, L. Bufumbo, et al. 2014. "Observational Study of the Acceptability of Sayana Press among Intramuscular DMPA Users in Uganda and Senegal." *Contraception* 89(5): 361–7; Polis, C.B., G.F. Nakigozi, H. Nakawooya, G. Mondo, F. Makumbi, et al. 2014. "Preference for Sayana Press versus Intramuscular Depo-Provera among HIV-Positive Women in Rakai, Uganda: A Randomized Crossover Trial." *Contraception* 89(5): 385–395.
- iii Burke et al., 2014; Ali, M.M., J. Cleland, and I.H. Shah. 2012. *Causes and Consequences of Contraceptive Discontinuation: Evidence from 60 Demographic and Health Surveys*. Geneva: World Health Organization.
- iv Corroon, M., E. Kebede, G. Spektor, and I. Speizer. 2016. Key Role of Drug Shops and Pharmacies for Family Planning in Urban Nigeria and Kenya." *Global Health Science and Practice* 4(4): 594–609; High-Impact Practices in Family Planning. 2013. "Drug Shops and Pharmacies: Sources of Family Planning Commodities and Information." Washington, DC: USAID.

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