



## CASE STUDY

### Expanding global access to contraceptive implants

CHAI AND PARTNERS ACHIEVED A PRICE REDUCTION AGREEMENT FOR CONTRACEPTIVE IMPLANTS THAT INCREASED TOTAL IMPLANT DISTRIBUTION BY 56% FROM 2012 TO 2013 AND WILL RESULT IN PROCUREMENT SAVINGS OF MORE THAN US\$300 MILLION OVER SIX YEARS.

#### OVERVIEW

Access to voluntary contraception saves the lives of mothers and infants by allowing women to better space and limit their pregnancies, improves health outcomes, strengthens the financial wellbeing of families, and helps achieve national health and economic goals.<sup>1</sup> Of the widely available family planning methods, three- and five-year contraceptive implants are two of the most highly effective at preventing pregnancy (Figure I) and are well suited for many women and health systems in low- and middle-income countries (LMICs).<sup>2</sup> Despite the efficacy and availability of quality-assured implants, evidence from national family planning programs has suggested a significant unmet need. CHAI identified several market barriers preventing access: high pricing compared to other contraceptive methods (which limited donor purchasing), no coordinated global supply planning or forecasting, and lack of trained health workers providing implants as part of routine family planning services.

#### THEORY OF CHANGE

An increase in demand, secured by donors through a volume guarantee, allows implant suppliers to achieve scale efficiencies and thus reduce prices. Price reductions for implant contraceptives increase access in LMICs and reduce the number of unwanted pregnancies, contributing to improved health outcomes, and ensuring that women have access to a broad range of contraceptive choices.

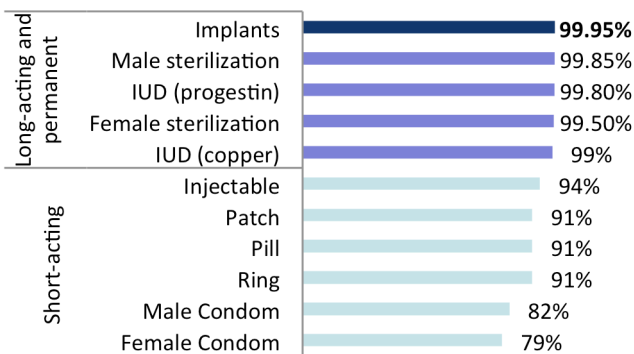
#### IMPACT

Price reductions for Jadelle (Bayer) and Implanon (Merck) will result in procurement savings of over US\$300 million, averting thousands of deaths over the six years of the agreements.

#### KEY PARTNERS

- BMGF
- DFID
- UNFPA
- USAID
- Norad
- SIDA
- CIFF

FIGURE I. EFFECTIVENESS OF MODERN CONTRACEPTIVES



In 2012, the Department for International Development (DFID) requested CHAI's assistance to support ongoing discussions with implant producers and to explore the scope for price reductions. CHAI's initial analysis indicated that the cost of producing implants was less than US\$5 per unit (far lower than the selling price at the time of US\$18 for Jadelle and US\$16.50 for Implanon) and that purchases of implants by international donors had increased five-fold in the past few years with only limited reductions in price.

These findings suggested that price reductions could be achieved using the potential demand, backed by donor funding, to gain production efficiencies at scale.

#### APPROACH

Building upon the growing demand for implants and the political focus on funding family planning interventions generated by the 2012 London Family Planning Summit,<sup>i</sup> CHAI conferred with major suppliers, buyers, and implementing partners in LMICs. These discussions helped to determine the scope for reducing prices and expanding uptake of contraceptive implants, and identified the following barriers:

**High prices were due in part to lack of visibility into demand, and thus sub-optimal management of production costs and assets.** To address this, CHAI conducted analyses to forecast implant demand and

<sup>i</sup> The 2012 London Family Planning summit united governments, donors, multilateral agencies, civil society, and private sector organizations around an ambitious goal: improve the health of women and children by providing an additional 120 million women in the world's poorest countries with access to voluntary family planning by 2020.

confirm the market's growth potential.<sup>ii</sup> The analysis concluded that global implant demand could reach approximately 9 million units per year by 2015, potentially expanding to over 11 million units by 2020.

**Production costs were not optimized due to fragmented and uncertain ordering patterns, different labeling and packaging configurations, and underutilization of available capacity.** In discussions with producers, CHAI identified steps that could be taken by procurement and funding groups to reduce overall costs based on the potential volume increase. Standardization of product configurations and coordinated purchases were identified as potential mechanisms that could lead to greater certainty in purchase commitments, allowing producers to optimize production costs and reduce prices.

**The contraceptive implant market was characterized by a 'high price/low volume trap,'** in which, suppliers are forced to keep implant unit pricing high due to unpredictable volumes, while Ministries of Health (MOHs) and partners are unable to purchase additional implants due to high prices. Demand aggregation via pooled procurement structures or volume guarantees is often useful in these markets. A volume guarantee is typically a contract between a guarantor and a supplier, which guarantees that procurement groups will buy specified order volumes over a period of time in exchange for a reduction in price.

CHAI worked with the Bill and Melinda Gates Foundation (BMGF) to develop a guarantee fund for health commodity markets. The mechanism was originally developed in 2012 and successfully applied to lower prices for a critical vaccine. A similar approach was employed for the implant price reductions, consisting of the following activities:

- **Approached donors<sup>iii</sup> to participate in a volume guarantee partnership** that could effectively operate in the implant market. CHAI and BMGF proposed a system in which donors agreed to participate in the volume guarantee effort, while CHAI and BMGF would investigate specific deal opportunities and present them to the group;
- **Identified guarantors to provide financial backing** to the volume guarantee via sharing of risk with BMGF.

<sup>ii</sup> MOHs and partners such as USAID, the United Nations Population Fund (UNFPA), DFID, and the Norwegian Agency for Development Cooperation (Norad) supplied the necessary data. USAID and UNFPA are the two major buyers; DFID and Norad are the largest bilateral donors.

<sup>iii</sup> Some donors can act as guarantors, while others cannot. CHAI worked with partners that could purchase implants, but not act as guarantors, and others that could participate in volume guarantees, but not purchase implants.

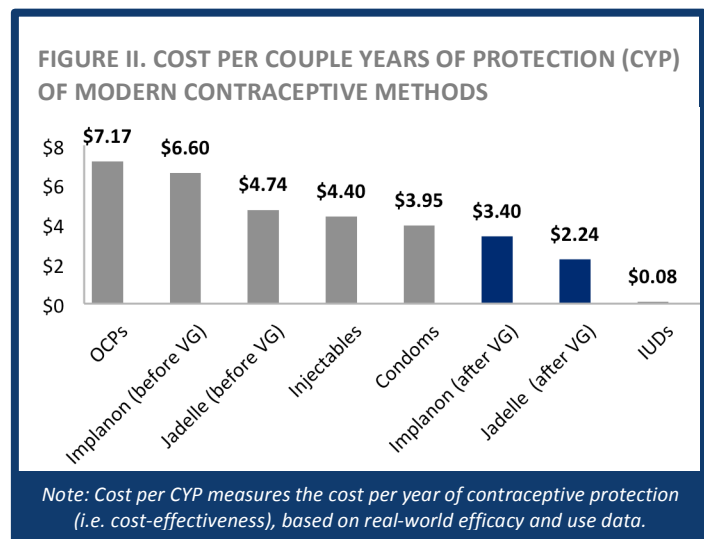
Should guaranteed volumes not be purchased in a specific period, the guarantors would cover the difference between the guaranteed volumes and the purchased volumes; and

- **Negotiated a volume guarantee-based price reduction agreement with suppliers.** An agreement was negotiated with both Bayer and Merck to reduce prices to US\$8.50 per unit in return for purchase commitments over six years. Bayer moved first to agree to a price reduction deal in mid-2012; Merck agreed to the price reduction in early 2013.

BMGF, Norad, the Swedish International Development Cooperation Agency (SIDA), and the Children's Investment Fund Foundation (CIFF) served as guarantors, while USAID, Norad, and DFID agreed to support implementation.

## IMPACT

In Q3 2012, the price of Jadelle (Bayer) was reduced from US\$18 to US\$8.50 per unit; in Q1 2013, Implanon (Merck) pricing was reduced from US\$16.50 to US\$8.50 per unit. These price reductions will result in procurement savings of over US\$300 million over the six years of the agreement, making implants one of the most cost-effective methods of contraception available (Figure II)<sup>3,4</sup> and freeing up funding to increase service delivery capacity.



In addition, the Jadelle Access Program alone is expected to avert more than 31 million unintended pregnancies between 2013 and 2018, and will ultimately avert over 414,000 child deaths and 41,000 maternal deaths.<sup>5</sup> The price reductions have created a virtuous cycle of reinforcing country-level demand and donor funding commitment, ultimately allowing the market to reach and exceed the forecasted potential.



After the announcement of the price reduction deals, the Jadelle and Implanon Access Programs (collectively, the Implant Access Program or IAP) were developed as a partnership between Bayer, Merck and their respective guarantors, purchasers, donors, and implementing partners. The IAP ensures that a consistent supply of implants will be available to meet demand at the reduced price for all 69 countries prioritized by Family Planning 2020 (FP2020 is a global partnership to expand access to family planning information, services, and supplies), over the six years covered by the guarantees and beyond.

Over the first two years of the program, the volumes greatly exceeded the amount specified in the guarantee by providing 3.4 million more implants than indicated in the agreement, an increase in total implant distribution by 56% between 2012 to 2013.<sup>6</sup> The price reductions for Jadelle and Implanon have therefore expanded the range of available options beyond short-acting methods and help to meet growing demand for contraception in LMICs.

## LIMITATIONS AND LESSONS LEARNED

During the development of the demand forecast, CHAI recognized that publicly available sources of implant market data did not provide a reliable assessment of current demand. To address this shortcoming, CHAI took steps to validate countries' initial projections by visiting MOHs and partners on the ground to understand demand, product preferences, barriers to access, and trajectory of implant use. Working with in-country partners allowed CHAI and other stakeholders to better understand true demand and market potential.

USAID and UNFPA were unable to sign multi-year volume guarantees due to legal constraints; as such, BMGF and CHAI were challenged with minimizing the risk for guarantors. In response, CHAI helped structure a grant from BMGF to John Snow, Inc. (JSI) to monitor confirmed and planned orders. This provided information on the allocation of production capacity and increased visibility into orders, thus helping coordinate UNFPA's and USAID's supply planning and forecasting processes to ensure volume guarantees are being met. The collaboration is formalized through the Coordinated Supply Planning Initiative, in which CHAI participates with colleagues from USAID, UNFPA, and JSI, enabling the global community to address similar challenges in the future.

In working with MOHs and other partners in country, CHAI realized that additional funding and interventions were required to ensure that the implants being purchased were ultimately provided to women choosing

them. CHAI worked with BMGF to mobilize funding for groups like Jhpiego, JSI, and CHAI to support these efforts on the ground. This funding will contribute more broadly to scale-up efforts through improved forecasting and supply planning, gap analysis and more effective coordination of resources, and targeted service delivery and supply chain interventions.

## FUTURE OUTLOOK

Additional countries are seeking CHAI's support to increase access to implants and family planning more broadly, and CHAI will continue to provide support to accelerate scale-up. As MOHs are equipped with the necessary tools and capacity, CHAI will ultimately transition out of its analytical and management support role. CHAI is also testing lower-cost service delivery interventions to more rapidly increase coverage of family planning services.

On the supply side, CHAI is working with new implant manufacturers, including Shanghai Dahua Pharmaceutical Co., Ltd, to support market entry of additional long-acting reversible contraception suppliers and thereby increase competition. These efforts aim to ensure sufficient high-quality, affordable supply of implants beyond the timeframe of the IAP volume guarantees.

## REFERENCES

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<http://www.prb.org/pdf09/familyplanningsaveslives.pdf>. 2009. Accessed December 2014.

<sup>2</sup> Trussel, J. Contraceptive failure in the United States. *Contraception* May 2011. 83(5):397–404.

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<sup>3</sup> RHI Shipment Data. Available at: <https://www.myaccessrh.org/rhi-home>

<sup>4</sup> USAID Website. Couple Years of Protection (CYP). April 2014. Available at: <http://www.usaid.gov/what-we-do/global-health/family-planning/couple-years-protection-cyp>

<sup>5</sup> Maries Stopes International Website. "Impact 2" (July 2013). Available at <http://mariestopes.org/impact-2>.

<sup>6</sup> USAID | DELIVER PROJECT. JSI Implants Historic Trends. May 2015.

### About the Clinton Health Access Initiative, Inc.

The Clinton Health Access Initiative, Inc. (CHAI) is a global health organization committed to strengthening integrated health systems and expanding access to care and treatment in the developing world. CHAI's solution-oriented approach focuses on improving market dynamics for medicines and diagnostics; lowering prices for treatment; accelerating access to lifesaving technologies; and helping governments build the capacity required for high-quality care and treatment programs. Though CHAI remains committed to its initial focus on HIV/AIDS; CHAI also has expanded its scope to work in the following program areas: HIV/AIDS and Tuberculosis (TB), Improving the Efficiency and Effectiveness of Healthcare Systems, Malaria, Human Resources for Health, Vaccines, and Maternal, Child, and Newborn Health. For more information, please visit:

[www.clintonhealthaccess.org](http://www.clintonhealthaccess.org)

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