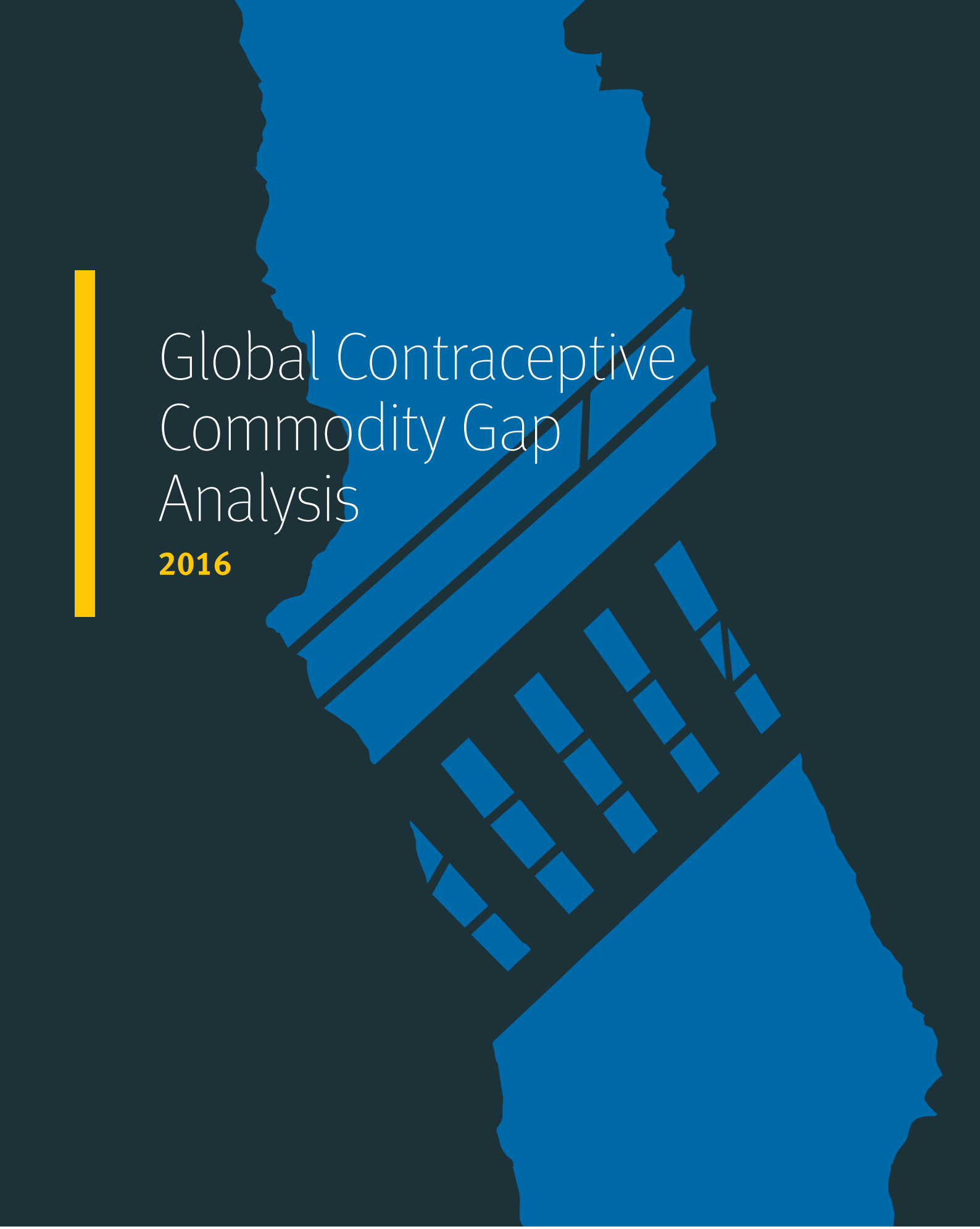

# Global Contraceptive Commodity Gap Analysis

**2016**

Reproductive Health
SUPPLIES COALITION

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# Acronyms

| | |
|---|---|
| **AW** | All women |
| **CHAI** | Clinton Health Access Initiative |
| **CIFF** | Children's Investment Fund Foundation |
| **CPR** | Contraceptive prevalence rate |
| **CSO** | Civil society organization |
| **CYP** | Couple year of protection |
| **DFID** | UK Department for International Development |
| **DHS** | Demographic and Health Surveys |
| **EC** | Emergency contraception |
| **FP2020** | Family Planning 2020 |
| **FPET** | Family Planning Estimation Tool |
| **INGO** | International non-governmental organization |
| **IPPF** | International Planned Parenthood Federation |
| **IUD** | Intrauterine device |
| **JSI** | John Snow, Inc. |
| **LAM** | Lactational amenorrhea method |
| **LAPM** | Long-acting and permanent methods (of contraception) |
| **LMI** | Low- and middle-income (country/countries) |
| **mCPR** | Contraceptive Prevalence Rate, modern methods |
| **MICs** | Multiple Indicator Cluster surveys |
| **MSI** | Marie Stopes International |
| **NGO** | Non-governmental organization |
| **NIDI** | Netherlands Interdisciplinary Demographics Institute |
| **OOP** | Out-of-pocket |
| **PSI** | Population Services International |
| **RHSC** | Reproductive Health Supplies Coalition |
| **SDM** | Standard days method |
| **SSA** | Sub-Saharan Africa |
| **UNFPA** | United Nations Population Fund |
| **UNPD** | United Nations Population Division |
| **USAID** | US Agency for International Development |
| **WRA** | Women of reproductive age |

# SECTION 1

# Introduction to the Global Contraceptive Commodity Gap Analysis 2016

1. How much is spent on contraceptive supplies, and what are the relative contributions of donors, governments of low- and middle-income countries, and individuals?
2. How many women will use each method of contraception in 2020, and what volume of supplies will they consume?
3. How much do the supplies consumed by all users of contraception currently cost, and how much greater will the cost be in the year 2020?
4. What funding gaps can we anticipate in the year 2020? If donor and government funding does not increase, what burden will shift to out-of-pocket expenditures by individuals?

Political commitment to expanding access to family planning has been unusually strong and widespread for most of the past decade. Universal access to sexual and reproductive health care services, including for family planning, is one of the targets of the Sustainable Development Goals. Ninety-three governments, donors, civil society organizations, and other partners have made formal commitments to the FP2020 initiative.[1]

Expanding access to family planning requires the production and provision of increasing volumes of high-quality contraceptive supplies that will meet women's diverse needs and preferences. Therefore it is imperative that we address the questions listed above.

None of the questions listed above lend themselves to simple answers. Fortunately, our community has developed a rich array of methodologies and data sources. Unfortunately, they can lead to a proliferation of seemingly conflicting findings and confusing, or even contradictory, messages.

Therefore, in taking up the challenge of projecting and quantifying the growing demand for contraceptive supplies, we turned to the convening power of the Reproductive Health Supplies Coalition to ask our partners to think strategically about the value these methodologies offer and the ways they may be sequenced or juxtaposed to provide greater insights. We engaged in wide ranging consultations with 43 donors, manufacturers, advocates, and technical experts, representing 24 agencies and organizations. The result is RHSC's groundbreaking **Global Contraceptive Commodity Gap Analysis (CGA)**.

Our analysis brings together **Track20's**[2] innovative approach to measuring the number of contraceptive users[3] and modeling changes in method mix; contraceptive prevalence projections from the **United Nations Population Division**[4]; public sector product price research by the **Guttmacher institute**[5]; donor spending data collected by **UNFPA**[6] and **NIDI**[7]; **Avenir Health's**[8] approach to measuring total spending on contraceptive supplies; and insights from an analysis of country-produced quantification reports provided by **CHAI**[9] and **JSI**[10].

The findings we present comprise individual estimates[11] for **135 low- and middle-income countries**.[12] In addition, we highlight important findings for the subset of **69 FP2020 focus countries**.[13] We also present findings from a procurement analysis of **20 countries**.[14]

The wealth of expertise in the global family planning community, the prospect of new analyses and data that will become available in the coming months, the limitations of what we were able to include in this report, and, most importantly, the urgent need to ensure contraceptive commodity security, all point to the importance of the CGA as an annual exercise.

# KEY QUESTIONS & FINDINGS: 135 LMI COUNTRIES

## 1 How much is spent on contraceptive supplies? How much spending can we attribute to donors, governments, and individuals?

**2014 ESTIMATE**

**$ 1.203 BILLION**

Spent on Supplies

In 2014, **$1.203 billion** was spent on contraceptive supplies in the 135 LMI countries.

- **25%** represents spending from all donor sources,
- **17%** represents spending by governments using non-donor funds, and
- **58%** represents individuals purchasing supplies from the private sector.

**Note**

*2014 is the most recent year with sufficient data for this analysis.*

## 2 How many users of contraception are there now? How many will there be in 2020?

**2016 ESTIMATE**

**452.7 MILLION**

Users of Contraception

**2020 ESTIMATE**

**490 MILLION**

If current trajectories of growth in contraceptive use continue, by 2020 there will be more than **490 million** users of contraception living in the 135 LMI countries. This is more than **37 million** additional users compared to 2016.

**2020 ESTIMATE**

**550 MILLION**

If the FP2020 goal is achieved and contraceptive use accelerates in all 135 LMI countries, by 2020 there will be nearly **550 million** users of contraception. This is more than **97 million** additional users compared to 2016.

## 3 What is the cost of the supplies currently consumed by all users of contraception? How much greater will the cost be in 2020?

**2016 ESTIMATE**

**$ 1.352 BILLION**

Cost of Supplies

**2020 ESTIMATE**

**$ 1.525 BILLION**

If current trajectories of growth in contraceptive use continue in 135 LMI countries, by 2020 users will consume a volume of supplies worth **$1.525 billion** at current prices. The greater volume adds **$173.2 million** in cost compared to 2016.

**2020 ESTIMATE**

**$ 1.744 BILLION**

If the FP2020 goal is achieved and contraceptive use accelerates in all 135 LMI countries, by 2020 users will consume a volume of supplies worth **$1.744 billion** at current prices. The greater volume adds **$392.4 million** in cost compared to 2016.

## 4 What contraceptive supplies funding gaps can we anticipate for the year 2020?

**2020 ESTIMATE**

**$ 322 MILLION**

Funding Gap

If current trajectories of growth in contraceptive use continue in the 135 LMI countries, the gap between the amount spent on supplies in 2014 and the cost of the volume of supplies users will require in 2020 will be **$322 million**.

**2020 ESTIMATE**

**$ 541 MILLION**

Funding Gap

If the FP2020 goal is achieved and contraceptive use accelerates in all 135 LMI countries, the gap between the amount spent on supplies in 2014 and the cost of the volume of supplies users will require in 2020 will be **$541 million**.

**Scenario A** | Current growth trajectories of contraceptive use continue in each country.

**Scenario B** | The FP2020 goal is achieved in the 69 focus countries, and a demonstration effect accelerates the increase of contraceptive use in the remaining 66 LMI countries.

# KEY QUESTIONS & FINDINGS: 69 FP2020 FOCUS COUNTRIES

## 1 How much is spent on contraceptive supplies? How much spending can we attribute to donors, governments, and individuals?

**2014 ESTIMATE**

**$ 821.8 MILLION**

Spent on Supplies

In 2014, nearly **$822 million** was spent on contraceptive supplies across the 69 FP2020 countries.

- **30%** represents spending from all donor sources,
- **15%** represents spending by governments using non-donor funds, and
- **54%** represents individuals purchasing supplies from the private sector.

**Note**

*2014 is the most recent year with sufficient data for this analysis.*

## 2 How many users of contraception are there now? How many will there be in 2020?

**2016 ESTIMATE**

**300.3 MILLION**

Users of Contraception

**2020 ESTIMATE**

**334 MILLION**

If current trajectories of growth in contraceptive use continue, by 2020 there will be **334 million** users of contraception living in the 69 FP2020 focus countries. This is nearly **34 million** more users than there were in 2016.

**2020 ESTIMATE**

**390 MILLION**

If the FP2020 goal is achieved, by 2020 there will be more than **390 million** users of contraception living in the 69 FP2020 focus countries. This is nearly **90 million** more users than there were in 2016.

## 3 What is the cost of the supplies currently consumed by all users of contraception? How much greater will the cost be in 2020?

**2016 ESTIMATE**

**$ 896 MILLION**

Cost of Supplies

**2020 ESTIMATE**

**$ 1.055 BILLION**

If current trajectories of growth in contraceptive use continue in the 69 FP2020 focus countries, by 2020 users will consume a volume of supplies worth **$1.055 billion** at current prices. The greater volume adds over **$159 million** in cost compared to 2016.

**2020 ESTIMATE**

**$ 1.259 BILLION**

If the FP2020 goal is achieved in the 69 FP2020 focus countries, by 2020 users will consume a volume of supplies worth **$1.259 billion** at current prices. The greater volume adds **$363.2 million** in cost compared to 2016.

## 4 What contraceptive supplies funding gaps can we anticipate for the year 2020?

**2020 ESTIMATE**

**$ 233 MILLION**

Funding Gap

If current trajectories of growth in contraceptive use continue in the 69 FP2020 focus countries, the gap between the amount spent on supplies in 2014 and the cost of the volume of supplies users will require in 2020 will be **$233 million**.

**2020 ESTIMATE**

**$ 437 MILLION**

Funding Gap

If the FP2020 goal is achieved in the 69 focus countries, the gap between the amount spent on supplies in 2014 and the cost of the supplies users will require in 2020 will be **$437 million**.

**Scenario A** | Current growth trajectories of contraceptive use continue in each country.

**Scenario B** | The FP2020 goal is achieved in the 69 FP2020 focus countries.

# The Development of the CGA Project

The Reproductive Health Supplies Coalition envisioned the CGA project as a means of bringing together diverse data sources and methodologies for the purpose of producing actionable information for a broad range of stakeholders. To determine which data sources and methodologies to draw from, and which stakeholders to consult about their information needs, RHSC convened a small group of advisors to provide formative guidance.

A stakeholder consultation for the CGA project was conducted in March and April of 2016. It comprised interviews with 30 individuals from 19 agencies and organizations. Following the stakeholder consultation, RHSC convened a group of technical experts to discuss the range of available data sources and methodologies that might contribute to the CGA project.

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| John Snow, Inc. | Alexis Heaton, Emma Stewart |
| Netherlands Interdisciplinary Demographics Institute | Erik Beekink, Patricia Hernandez, Karen Vrijberg |
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| RHSC | John Skibiak, Nina Miller (consultant) |
| UNFPA | Jennie Greaney |
| United Nations Population Division | Vladimia Kantorova |
| USAID \| Deliver Project | Jim Rosen |

Several individuals who did not participate in the stakeholder consultation or technical experts meeting provided data and expertise during the implementation of this project. They include: **Maggie Murphy** of John Snow, Inc., **John Ross** of Avenir Health, **Eleni Han** of CHAI, and **Kabir Ahmed** and **Sandra Novo** of UNFPA.

# Findings from the Stakeholder Consultation

The stakeholder consultation produced a rich variety of insights into information gaps and potential avenues for further analysis. Many of these insights and suggestions helped shape the scope and contents of this report.

We present here a selection of findings from the stakeholder consultation with the hope the community will benefit from the valuable information that was shared.

## Manufacturers want forecasts that predict what orders will be.

**"If we had more lead time, and if we knew that money would be there, we would invest in building our manufacturing capacity."**

**—Innovator manufacturer**

All five manufacturer interviewees said they did not anticipate major shifts in demand between now and 2020. Nevertheless, they said that order volumes are difficult to predict from year to year.

The manufacturer interviewees said unpredictability was mainly a feature of countries with largely donor-subsidized markets; they were more confident in their ability to forecast demand in non-donor subsidized countries using their own sales records and commercial market data. They identified accurate forecasts of the volumes that institutional purchasers will order, at least one if not two to three years in advance of receiving the actual order, as their most pressing information need.

In addition, they said that forecasts of institutional purchaser orders would allow them to develop production schedules that would realize economies of scale and other efficiencies that would help keep prices low. Two said the forecasts would influence decisions to invest in building additional capacity, and two said such forecasts might lead to a more attractive business model that could influence their decision to stay in a particular market.

## Forecasts of orders should take into account more than documentation of previous orders or demographic and service statistic data. There is strong interest in data on available funding.

**"It is one thing to predict that the demand for injectables will be x million units. But if the funding isn't there for procurement, such predictions are not helpful."**

**—Innovator manufacturer**

All the manufacturer interviewees emphasized that estimates of increased demand, while important, are less actionable than other types of information. One noted that order volumes vary from year to year not because demand has changed, but due to factors such as donor funding levels or stockpiling. All five said their most critical information gap, in lieu of actual orders, is knowing how much funding will be available to purchase and deliver supplies.

## Manufacturers currently underutilize demographic data. They are interested in learning more about the potential for demographic data to inform their forecasts.

**"We need demographic data that will help us detect large shifts in demand far enough in advance to adjust our plans."**

**—Generics manufacturer**

While manufacturers' priority information needs are (1) advance knowledge of order volumes and (2) greater insight into donor funding, most interviewees expressed an interest in learning more about changes in demand from analyses of demographic data. There was also interest in using demographic data to identify major shifts in demand far enough in advance to take corrective action.

## Donors have different perspectives on the acceleration of demand for contraceptives.

Donors offered differing predictions about the acceleration of demand during the coming years: some said family planning program expansion will lead to the achievement of the FP2020 goal in the year 2020, while others expected countries to continue in their current growth patterns (with modest shifts in method mix). Regardless of growth in future years, donors agreed it is essential that the family planning community clarify and agree on the true levels of funding, supplies, and other resources needed to meet the **current** demand for contraceptives.

## Donors identified several priority information gaps, and decisions that would be affected if these gaps were filled.

Donors said that a thorough quantification of the full costs of meeting the demand for contraceptives was critical. Donors also prioritized the need for better data on particular market dynamics (product diffusion rates, and consumption / wastage, respectively), and data and analysis to help them detect large shifts in method mix or demand. Additional information needs pertained to funding decisions and price and volume negotiations. Filling these gaps would help them make decisions about the provision of technical assistance to countries, as well as improvements in planning at the global and country levels.

## Advocates identified several information gaps that, if filled, would strengthen or refine their strategies.

**"Tracking supplies of emergency contraception would mean collecting data from roughly 200 different manufacturers."**

**—Technical expert/advocate**

Advocates identified a number of topics warranting greater investigation, such as the relationship between contraceptive prevalence and the availability of contraceptive supplies, with attention to the role of community norms and concerns over side effects vs. stock constraints and affordability. Another topic mentioned was the influence of financial subsidies and incentives on uptake of a particular method and overall method mix.

Technical experts say there are significant and persistent visibility gaps in the most frequently used data sources.

Technical experts noted that even the data sources and reports they regularly use have significant visibility gaps. Examples of "blind spots" include:

- Greater understanding is needed of the degree to which increasing use of one method (for example, implants) represents new users of contraception versus existing users who are shifting between contraceptive methods.
- There is strong insight into the contraceptive supply needs of some countries, especially those that have robust national quantification processes, but almost no insight into others.

No regularly published report provides a "big picture" overview of the contraceptive supplies security landscape.

**"The publishing of multiple, contradictory data analyses can be worse than having no data at all."**

**—Advocate**

Advocates and technical experts noted that different methodologies have led to the publication of seemingly conflicting estimates, and this lack of alignment can present decision-makers with a confusing, sometimes contradictory array of messages.

# SECTION 2

# Four Key Questions and Findings

In this section we address a selection of questions that emerged from our consultation with stakeholders. Our responses demonstrate the blending of expertise that took place among the participants in this project as we explored the parameters of the available data and determined what factors we could, and could not, quantify.

The data we present here refer mainly to aggregate totals and changes between now and 2020. In subsequent sections we present detailed analyses of changes year-by-year and method-by-method for the set of 135 LMI countries and subset of 69 FP2020 focus countries. Additional information about the methodologies and data sources used to produce the analyses can be found in Section 7.

How much is spent on contraceptive supplies, and what are the relative contributions of donors, governments of low- and middle-income countries, and individuals?

To address this question, we produced an analysis of total spending on contraceptive supplies across the 135 LMI countries, and within that, spending amongst the subset of 69 FP2020 countries. Our analysis comprises all spending on contraceptive supplies that transpired in the year 2014, which is the most recent year for which there is sufficient data for all the countries in the CGA's scope.[15] The next iteration of the CGA will present updated estimates reflecting spending on contraceptive supplies in 2015.

Total spending on supplies in 2014 includes expenditures by institutional purchasers who may have procured supplies at levels above or below the quantities needed for individual user consumption in a single year. The distinctions between the quantities of supplies required for user consumption and the quantities procured in the public sector are discussed later in this section and in Section 3.

**Our analysis disaggregates the total amount spent by three categories of spender, which are described below.**

## Donors | public sector

This category captures direct spending on supplies, monetary contributions used to underwrite supply procurement, the value of in–kind contributions of supplies, basket funds provided by donors and used by governments to procure supplies, and World Bank loan funds used to procure supplies.

Donor entities in this category include: aid agencies such as DFID and USAID; international institutions such as UNFPA and the World Bank; social marketing groups and INGOs such as IPPF, MSI, and PSI, most of whose procurement is subsidized by donor funding; and philanthropic entities.

Data collected annually by UNFPA and NIDI to produce UNFPA's annual External Support for Procurement report was the predominant source of information for this category.

## Governments | public sector

This category consists of spending by the governments of the 135 LMI countries (including the subset of 69 FP2020 focus countries) using internally generated (non-donor, non-basket fund, and non-World Bank loan) revenue.

Data collected by NIDI in country surveys and records in the CS Indicators database informed this category.

## Individuals | private sector

This category consists mainly of out-of-pocket (OOP) spending by individuals purchasing their own supplies from private sector entities, and a much smaller amount representing employer-provided health services.

Data from NIDI informed this category, and where gaps in data were present, we inferred individual OOP spending by extracting from the DHS and other household surveys the number of users of each method of contraception who indicated they received services and supplies from a private sector provider. The quantity of supplies these users would consume in a year was then costed using commodity prices appropriate to each method in each country (provided by the Guttmacher Institute).

## Total spending on contraceptive supplies: 135 LMI countries

In total, more than **$1.203 billion** was spent on contraceptive supplies across the 135 LMI countries in 2014 (Table 1). Individuals who paid for their own contraceptive supplies comprised a much larger percentage of total spending (**58%**) than the public sector (**42%**), which included all donor funding and governments that spent domestically generated resources on supplies (**25%** and **17%**, respectively).

| TABLE 1. TOTAL SPENDING ON CONTRACEPTIVE SUPPLIES IN 2014 | | | | | | | |
|---|---|---|---|---|---|---|---|
| 135 LOW- AND MIDDLE-INCOME COUNTRIES | | | | | | | |
| Total spending on supplies | $ | 1,203,000,000 | | | | | |
| Combined Public Sector | $ | 508,400,000 | 42% | Donors only | $ | 305,500,000 | 25% |
| | | | | Governments only | $ | 202.900.000 | 17% |
| Individuals/Private Sector | $ | 694,900,000 | 58% | | | | |

## Total spending on contraceptive supplies: 69 FP2020 focus countries

In the subset of 69 FP2020 focus countries, nearly **$822 million** was spent on contraceptive supplies in 2014 (Table 2). Of this total, individuals were responsible for a much larger percentage (**54%**) of the total amount spent than either donors (**30%**) or governments (**15%**). Unsurprisingly, the governments of the subset of 69 FP2020 focus countries – the lowest-income countries – spent relatively less than governments in the full set of 135 LMI countries (**15%** vs. **17%**).

It is noteworthy that spending by individuals who obtained their contraceptive supplies through the private sector still comprised a majority of total spending. While the global family planning community has understandably focused most of its attention on public sector funding for contraceptive supplies, the role of individual spending deserves greater investigation.

| TABLE 2. TOTAL SPENDING ON CONTRACEPTIVE SUPPLIES IN 2014 | | | | | | | |
|---|---|---|---|---|---|---|---|
| 69 FP2020 FOCUS COUNTRIES | | | | | | | |
| Total spending on supplies | $ | 821,800,000 | | | | | |
| Combined Public Sector | $ | 374,700,000 | 46% | Donors only | $ | 248,400,000 | 30% |
| | | | | Governments only | $ | 126,300,000 | 15% |
| Individuals/Private Sector | $ | 447,100,000 | 54% | | | | |

How many women will use each method of contraception in 2020, and what volume of supplies will they consume?

To answer this question, we calculated the number of women using modern methods of contraception, changes in method mix over time, and the quantities of supplies these users would consume under the two different scenarios.

## Number of users of contraception

Our analysis begins with the number of women using contraceptives (Figure 1). In 2016, there were **452.7 million** users of contraception living in the 135 LMI countries. **300.3 million** of them lived in the 69 FP2020 focus countries. They included both married and unmarried women, served by both the public and the private sectors.

Interviews with individual women generate the data on contraceptive use collected by DHS[16], MICs[17], PMA2020[18], and national and subnational health, socio-economic, and fertility surveys. All of these sources, along with high-quality service statistics, contributed to our estimates of the number of users of each method. Our analysis comprises individual estimates for each of the 135 LMI countries, including the subset of 69 FP2020 countries.

To project the number of users of each contraceptive method in the year 2020, one must make assumptions about future changes in the number of users of contraception and shifts in method mix between now and then. For the CGA-2016 analysis, we posited **two scenarios**:

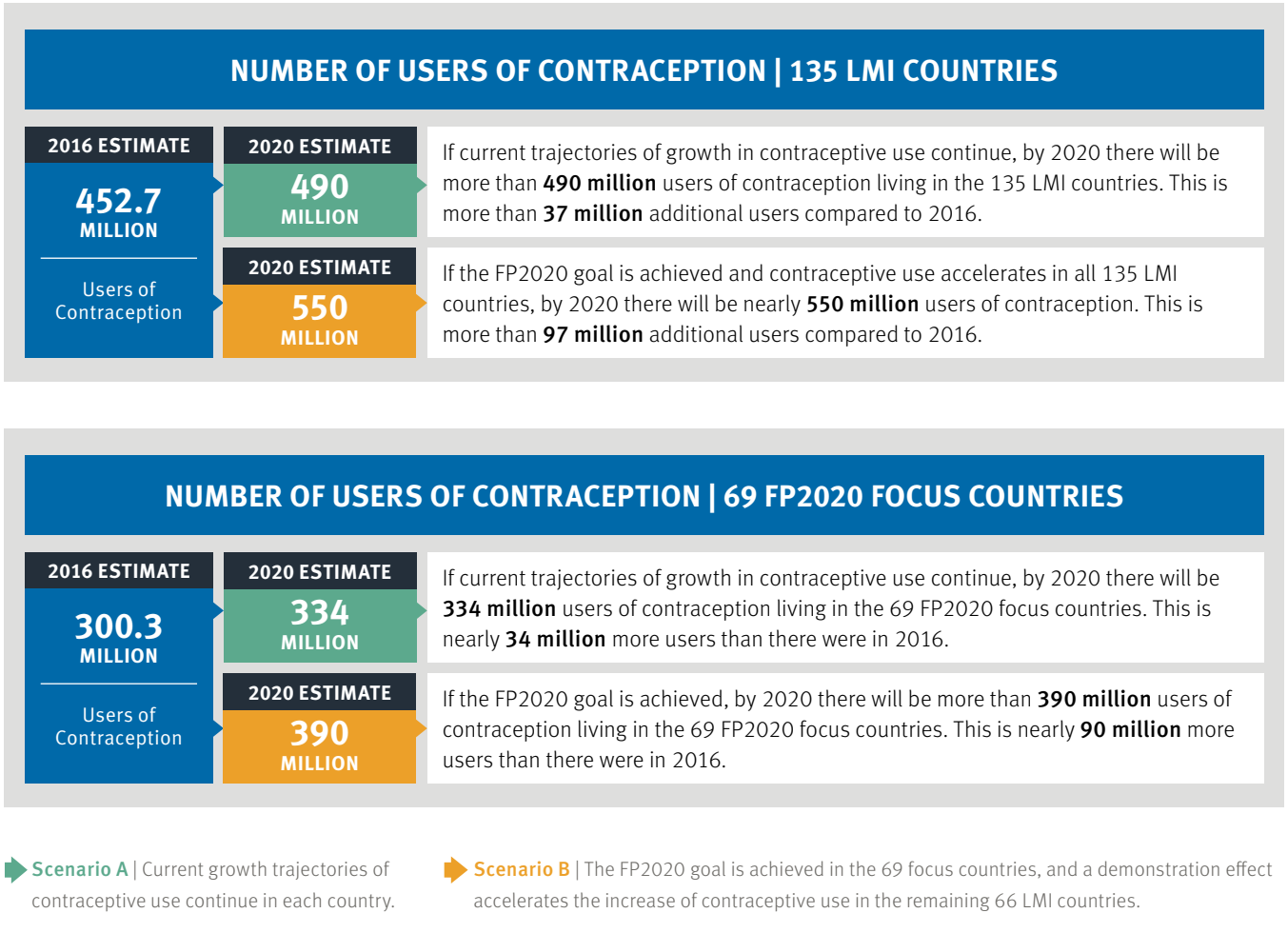
### SCENARIO A

Assumes that each country will continue in its current pattern of change in the number of users and shifts in method mix. Throughout this report, estimates related to Scenario A are color-coded green.

### SCENARIO B

Envisions the achievement of FP2020's goal for its 69 FP2020 focus countries, namely 120 million additional users of contraception by the year 2020.[19] For our analysis of the full set of 135 LMI countries, Scenario B assumes that increased contraceptive use in the 69 countries would generate a demonstration effect resulting in accelerated demand for contraception across the other 66 LMI countries.[20] Throughout this report estimates related to Scenario B are color-coded orange.

FIGURE 1. NUMBER OF USERS OF CONTRACEPTION




**Scenario A** | Current growth trajectories of contraceptive use continue in each country.

**Scenario B** | The FP2020 goal is achieved in the 69 focus countries, and a demonstration effect accelerates the increase of contraceptive use in the remaining 66 LMI countries.

# Changes in method mix over time under each scenario

Our method mix is composed of the six most prevalent methods of contraception, plus a seventh miscellaneous category. The methods are:

- Sterilization (male and female)
- Implants
- IUDs
- Injectables
- Pills
- Male condoms (contraceptive use only)
- Other (Includes, where data are available: female condoms, EC, SDM, LAM, and spermicides/other barrier methods)

We know that changes in method preference and availability shift over time. Therefore, we projected annual changes in method mix from 2016 to 2020 for the set of 135 LMI countries and subset of 69 FP2020 focus countries, for Scenarios A and B (Figures 2 - 5).

**FIGURE 2. CHANGE IN NUMBER OF USERS PER METHOD, 2016-2020 135 LMI COUNTRIES: SCENARIO A**

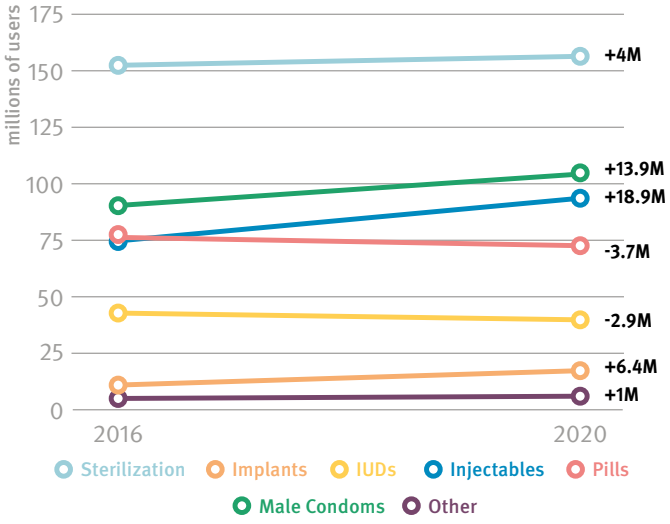



**FIGURE 3. CHANGE IN NUMBER OF USERS PER METHOD, 2016-2020 135 LMI COUNTRIES: SCENARIO B**

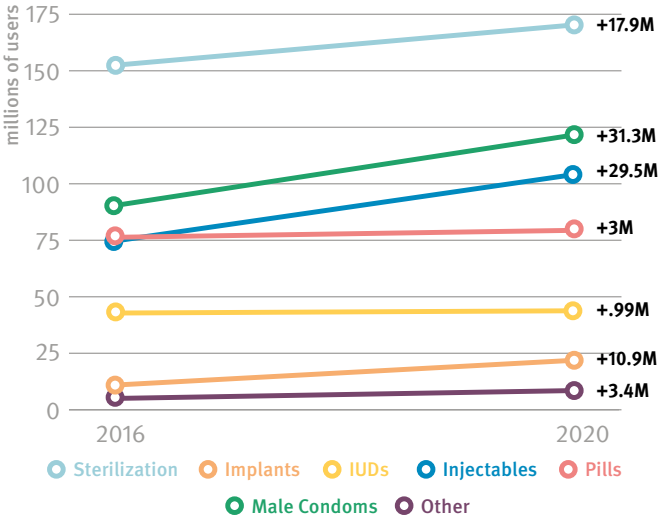



**FIGURE 4. CHANGE IN NUMBER OF USERS PER METHOD, 2016-2020 69 FP2020 FOCUS COUNTRIES: SCENARIO A**

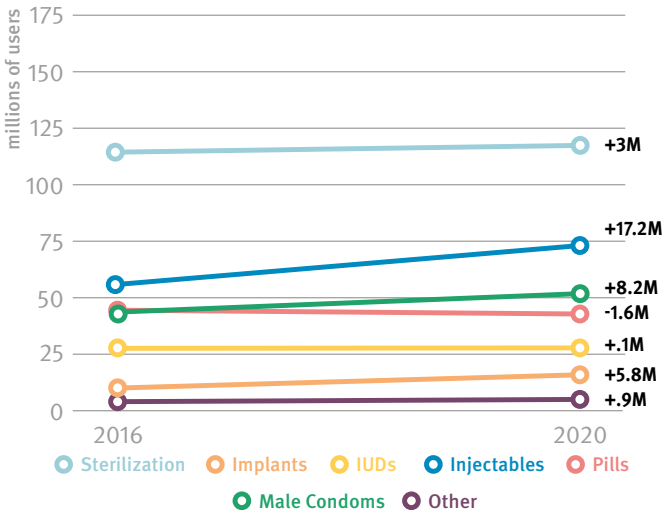
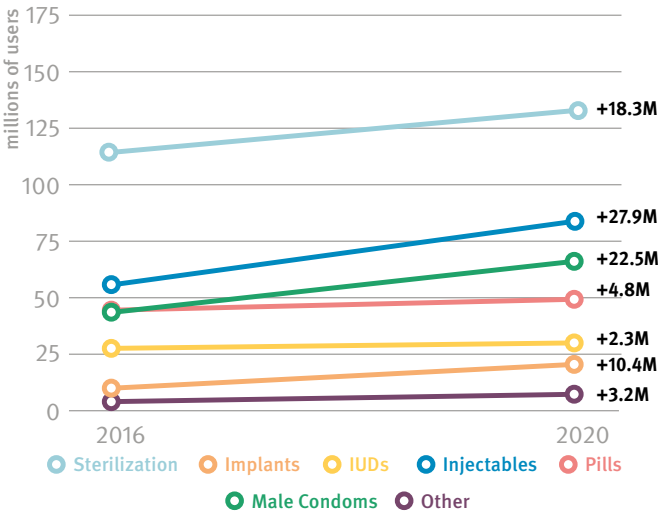



**FIGURE 5. CHANGE IN NUMBER OF USERS PER METHOD, 2016-2020 69 FP2020 FOCUS COUNTRIE: SCENARIO B**



# Quantities of supplies consumed by users of contraception

In this report, we refer to the volume of contraceptive commodities and associated clinical supplies that users of contraception will personally consume over the course of a year as "**consumption quantities**."

Consumption quantities are different from the volumes of contraceptive commodities bought by institutional purchasers; to note this distinction, we refer to the latter as "**procurement quantities**."

We used established methodologies to calculate the quantity of supplies that the users of each method of contraception will **consume** on an annual basis.

Different approaches were used to estimate consumption quantities for short-term versus long-acting and permanent methods (LAPM). Users of short-term methods must consume multiple commodities each year to obtain a full year of coverage. By contrast, a fraction of LAPM users will rely on implants or IUDs inserted or sterilizations performed in a prior year, and thus have no need to consume any commodities during the subsequent year(s).

**Procurement quantities** may reflect a number of factors in addition to user consumption, such as the volume necessary to fill supply pipelines and maintain adequate inventory levels from central warehouses to individual service delivery points.

Procurement quantities may take into account the volume of supplies already present or on order, inventory holding policies along the supply chain, and wastage or "leakage" of supplies at various levels. Constraints on funding, price incentives, plans to expand programs in the future, and preferences by donors or the government itself for particular methods or products may also influence what type and what volume of supplies to procure.

Our 2016 to 2020 consumption quantity estimates for the set of 135 LMI countries (Table 3) and subset of 69 FP2020 focus countries (Table 4) reflect our assumptions under Scenarios A and B regarding each country's patterns of change in the number of users of each method.

| TABLE 3. CONSUMPTION QUANTITIES FOR EACH CONTRACEPTIVE METHOD, 2016 AND 2020<br>135 LMI COUNTRIES: SCENARIOS A & B | | | | | |
|---|---|---|---|---|---|
| | 2016 | 2020 | | | |
| Method | Consumption Quantity | Scenario | Consumption Quantity | Change (2016 - 2020) | |
| | | | | (number) | (percent) |
| Sterilization | 12,800,000 | Scenario A | 13,100,000 | 330,000 | 3% |
| | | Scenario B | 14,200,000 | 1,400,000 | 11% |
| Implants | 4,300,000 | Scenario A | 6,500,000 | 2,200,000 | 51% |
| | | Scenario B | 9,400,000 | 5,100,000 | 119% |
| IUDs | 9,700,000 | Scenario A | 9,000,000 | (700,000) | -7% |
| | | Scenario B | 11,900,000 | 2,200,000 | 23% |
| Injectables | 309,400,000 | Scenario A | 387,200,000 | 77,800,000 | 25% |
| | | Scenario B | 434,100,000 | 124,700,000 | 40% |
| Pills | 1,069,000,000 | Scenario A | 1,016,000,000 | (52,900,000) | -5% |
| | | Scenario B | 1,112,000,000 | 43,100,000 | 4% |
| Male Condoms | 6,957,000,000 | Scenario A | 8,033,000,000 | 1,076,000,000 | 15% |
| | | Scenario B | 9,368,000,000 | 2,410,000,000 | 35% |
| Other | 58,000,000 | Scenario A | 74,600,000 | 16,500,000 | 28% |
| | | Scenario B | 108,700,000 | 50,700,000 | 87% |

| TABLE 4. CONSUMPTION QUANTITIES FOR EACH CONTRACEPTIVE METHOD, 2016 AND 2020<br>69 FP2020 FOCUS COUNTRIES: SCENARIOS A & B | | | | | |
|---|---|---|---|---|---|
| | 2016 | 2020 | | | |
| Method | Consumption Quantity | Scenario | Consumption Quantity | Change (2016 - 2020) | |
| | | | | (number) | (percent) |
| Sterilization | 9,000,000 | Scenario A | 9,200,000 | 230,000 | 3% |
| | | Scenario B | 10,400,000 | 1,400,000 | 16% |
| Implants | 3,900,000 | Scenario A | 5,900,000 | 2,000,000 | 51% |
| | | Scenario B | 8,800,000 | 4,900,000 | 124% |
| IUDs | 6,200,000 | Scenario A | 6,300,000 | 30,000 | 1% |
| | | Scenario B | 8,200,000 | 1,900,000 | 31% |
| Injectables | 228,700,000 | Scenario A | 299,100,000 | 70,400,000 | 31% |
| | | Scenario B | 346,300,000 | 117,600,000 | 51% |
| Pills | 623,400,000 | Scenario A | 599,700,000 | (23,700,000) | -4% |
| | | Scenario B | 691,500,000 | 68,000,000 | 11% |
| Male Condoms | 3,361,000,000 | Scenario A | 3,993,000,000 | 631,700,000 | 19% |
| | | Scenario B | 5,096,000,000 | 1,734,000,000 | 52% |
| Other | 45,000,000 | Scenario A | 62,300,000 | 17,200,000 | 38% |
| | | Scenario B | 94,400,000 | 49,300,000 | 109% |

How much do the supplies consumed by all users of contraception currently cost, and how much greater will the cost be in the year 2020?

Our estimates of the total cost of the supplies consumed by all users of contraception – which we refer to as **consumption costs** – build on our estimates of consumption quantities for each method (Figure 6). Simply put, the consumption cost reflects the consumption quantity for each method multiplied by the price of the requisite commodity or clinical supply.

To produce our consumption cost estimates, we used the country-specific analysis of commodity and associated clinical supply prices produced by the **Guttmacher Institute** for their annual **Adding It Up**[21] report. The Guttmacher analysis takes into account variations in the price paid for each contraceptive commodity and associated clinical supply in a country, as well as the mix of different products (e.g. types of implants) used, to produce an average cost per method for each country.

Given the diversity of supply sources, profit margins, and retail mark-ups, estimating the typical commodity and supply prices in the private sector is problematic. Thus, commodities and supplies that flow through the private sector were valued at public sector prices. For this reason, the estimated cost of commodities and supplies within the private sector may underestimate actual prices and costs.

**FIGURE 6: CONSUMPTION COST OF CONTRACEPTIVE SUPPLIES**

## CONSUMPTION COST OF SUPPLIES | 135 LOW- AND MIDDLE-INCOME COUNTRIES

| 2016 ESTIMATE | 2020 ESTIMATE | |
|---|---|---|
| $ 1.352 BILLION<br>Cost of Supplies | $ 1.525 BILLION | If current trajectories of growth in contraceptive use continue in 135 LMI countries, by 2020 users will consume a volume of supplies worth **$1.525 billion** at current prices. The greater volume adds **$173.2 million** in cost compared to 2016. |
| | $ 1.744 BILLION | If the FP2020 goal is achieved and contraceptive use accelerates in all 135 LMI countries, by 2020 users will consume a volume of supplies worth **$1.744 billion** at current prices. The greater volume adds **$392.4 million** in cost compared to 2016. |

## CONSUMPTION COST OF SUPPLIES | 69 FP2020 FOCUS COUNTRIES

| 2016 ESTIMATE | 2020 ESTIMATE | |
|---|---|---|
| $ 896 MILLION<br>Cost of Supplies | $ 1.055 BILLION | If current trajectories of growth in contraceptive use continue in the 69 FP2020 focus countries, by 2020 users will consume a volume of supplies worth **$1.055 billion** at current prices. The greater volume adds **$159 million** in cost compared to 2016. |
| | $ 1.259 BILLION | If the FP2020 goal is achieved in the 69 FP2020 focus countries, by 2020 users will consume a volume of supplies worth **$1.259 billion** at current prices. The greater volume adds **$363.2 million** in cost compared to 2016. |

**Scenario A** | Current growth trajectories of contraceptive use continue in each country.

**Scenario B** | The FP2020 goal is achieved in the 69 focus countries, and a demonstration effect accelerates the increase of contraceptive use in the remaining 66 LMI countries.

# Method mix: use versus cost

Method mix that reflects the number of users of each contraceptive method looks quite different from method mix that represents the consumption cost of supplies. The differences are due to several factors, including the cost variation among methods and the duration of protection offered by each method.

In 2016, injectables represented **16%** of all method use across the 135 LMI countries (Figure 7). It was, however, the most costly method in both absolute and relative terms in 2016: at **$545 million**, it represented **40%** of the **$1.352 billion** total consumption cost.

In the subset of 69 FP2020 focus countries, sterilization represented **38%** of method use but only **3%** of the method consumption cost (Figure 8). Together, pills and injectables represented just **34%** of method use but **80%** of method consumption cost.

**FIGURE 7. METHOD USE VS METHOD COST IN 2016**
**135 LMI COUNTRIES**

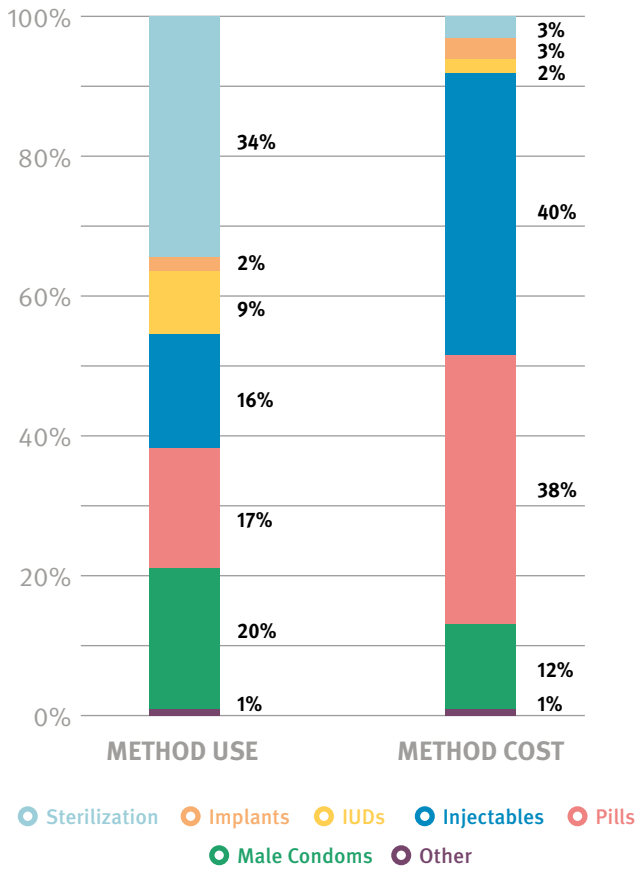
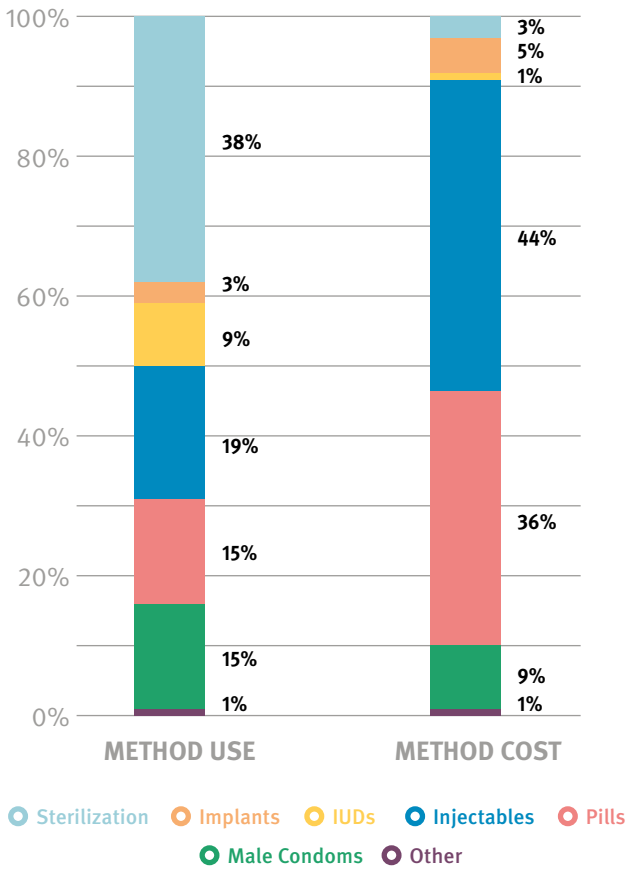



**FIGURE 8. METHOD USE VS METHOD COST IN 2016**
**69 FP2020 FOCUS COUNTRIES**



What contraceptive supplies funding gaps can we anticipate in the year 2020? If donor and government spending does not increase, what cost burden will shift to out-of-pocket expenditures by individuals?

## Projected need for additional funds

To estimate the size of potential funding gaps, we drew on the analyses discussed in this report thus far:

- The level of total spending on contraceptive supplies in 2014, and the relative percentages of total spending contributed by donors, governments, and individuals (page 14),
- The current number of users of each contraceptive method, projected annually to 2020 under Scenarios **A** & **B** (page 15),
- The quantity of supplies consumed by the users of each contraceptive method (the consumption quantity), projected annually to 2020 under Scenarios **A** & **B** (page 18), and
- The cost of the supplies consumed by users of contraception (the consumption cost), based on the consumption quantities for each method projected annually to 2020 under Scenarios **A** & **B** (page 21).

This report does not include projections of anticipated spending levels in the years 2016 - 2020. There are too many factors that may influence the amounts allocated and disbursed by donors and governments in any given year to make data-driven predictions about funding.

However, because estimating potential funding gaps requires a baseline of spending against which future costs can be compared, we chose to use and hold constant the most recent estimate of spending. This estimate reflects spending that transpired in 2014, which is the most recent year for which sufficient data exist for the countries included in the scope of the CGA.

*Therefore, the estimates of potential funding gaps should be understood as the annual difference between the total amount of actual spending on supplies in 2014 and the projected consumption cost of supplies under each scenario.*

Our estimates may understate the size of potential funding gaps for several reasons. First, current prices for contraceptive supplies are used throughout our analysis; costs are not adjusted for future inflation. Second, as we explore elsewhere in this report, the quantities of supplies required for procurement may be larger than the quantities users will consume in a single year; our spending analysis includes all expenditures on public sector procurement as well as out-of-pocket spending. Third, individuals who buy their own supplies from the private sector may pay higher prices than public sector entities that often buy in bulk and/or maximize economies of scale.

If the current patterns of change in the 135 LMI countries continue, we anticipate a contraceptive supplies funding gap of **$322 million** in the year 2020 (Figure 9). In other words, under Scenario A, the projected consumption cost of supplies in 2020 (**$1.525 billion**) exceeds the total amount spent on supplies in 2014 (**$1.203 billion**) by **$322 million**. Under Scenario B, the supplies funding gap for the 135 LMI countries in the year 2020 is much larger: **$541 million**.

For the subset of 69 FP2020 countries, the continuation of current patterns of change will result in a supplies funding gap of **$233 million** by the year 2020. If the FP2020 goal were achieved, the supplies funding gap in 2020 would be **$437 million**.[22]

FIGURE 9: PROJECTED SUPPLIES FUNDING GAPS IN 2020

The funding gap should be understood as the annual difference between the total amount of actual spending on supplies in 2014 and the projected cost, at current prices, of the supplies users will consume under each scenario. 2014 is the most recent year with sufficient data for this analysis.

## PROJECTED FUNDING GAPS | 135 LOW- AND MIDDLE-INCOME COUNTRIES

| COST OF SUPPLIES | SPENT ON SUPPLIES | FUNDING GAP | |
|---|---|---|---|
| $ 1.525 BILLION in 2020 | $ 1.203 BILLION in 2014 | $ 322 MILLION in 2020 | If current trajectories of growth in contraceptive use continue in the 135 LMI countries, the gap between the amount spent on supplies in 2014 and the cost of the volume of supplies users will require in 2020 will be **$322 million**. |
| $ 1.744 BILLION in 2020 | | $ 541 MILLION in 2020 | If the FP2020 goal is achieved and contraceptive use accelerates in all 135 LMI countries, the gap between the amount spent on supplies in 2014 and the cost of the volume of supplies users will require in 2020 will be **$541 million**. |

## PROJECTED FUNDING GAPS | 69 FP2020 FOCUS COUNTRIES

| COST OF SUPPLIES | SPENT ON SUPPLIES | FUNDING GAP | |
|---|---|---|---|
| $ 1.055 BILLION in 2020 | $ 821.8 MILLION in 2014 | $ 233 MILLION in 2020 | If current trajectories of growth in contraceptive use continue in the 69 FP2020 focus countries, the gap between the amount spent on supplies in 2014 and the cost of the supplies users will require in 2020 will be **$233 million**. |
| $ 1.259 BILLION in 2020 | | $ 437 MILLION in 2020 | If the FP2020 goal is achieved in the 69 focus countries, the gap between the amount spent on supplies in 2014 and the cost of the supplies users will require in 2020 will be **$437 million**. |

**Scenario A** | Current growth trajectories of contraceptive use continue in each country.

**Scenario B** | The FP2020 goal is achieved in the 69 focus countries, and a demonstration effect accelerates the increase of contraceptive use in the remaining 66 LMI countries.

## Distribution of the cost among donors, governments, and individuals

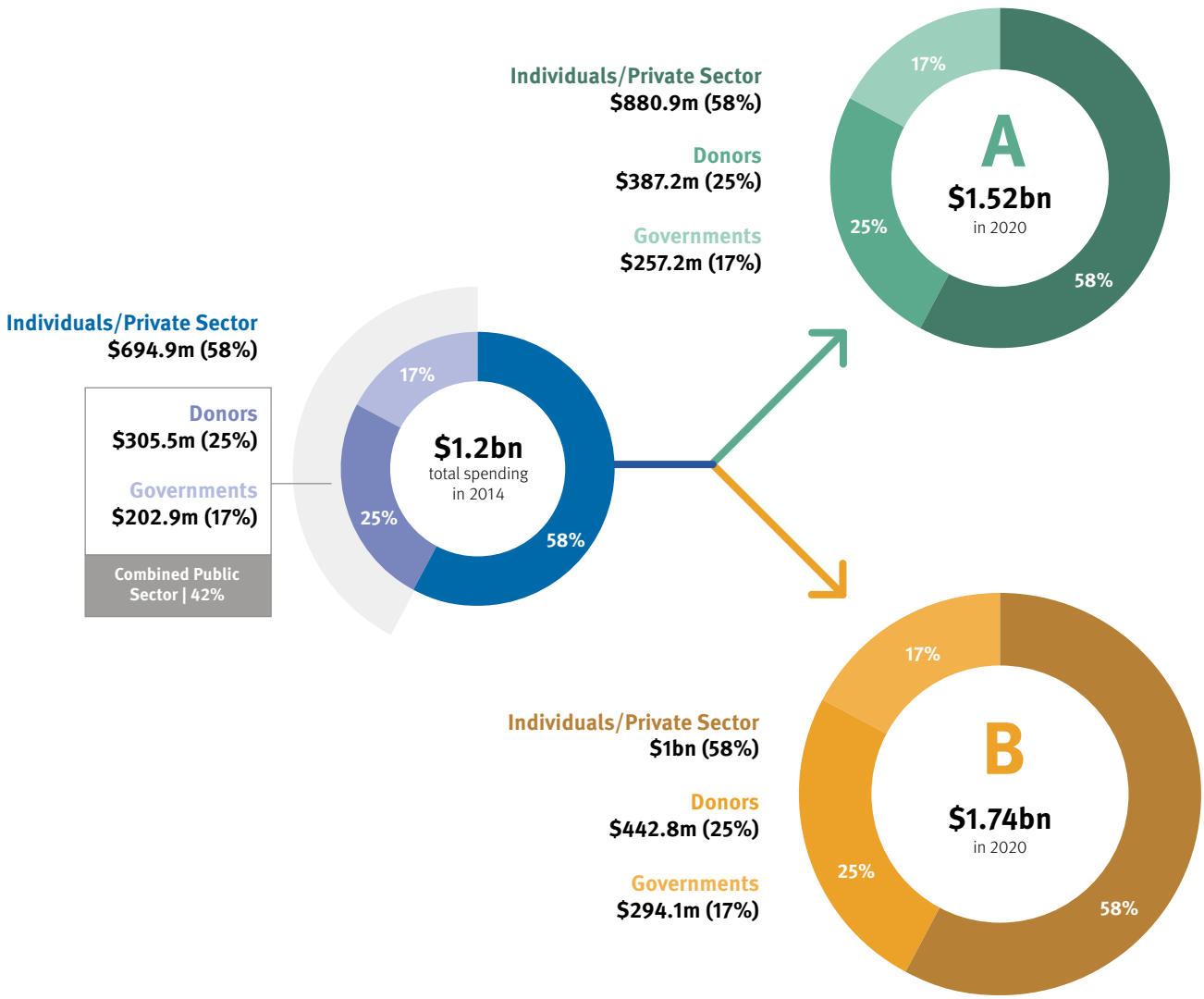
Just as we cannot predict future levels of funding, we cannot predict whether the additional funding required under each scenario will be provided by donors, governments, or individuals.

If we assume, however, that neither donors nor governments intend to reduce the share of funding they each contribute (as of 2014) to total spending on supplies, we can estimate the amount of the projected funding gap that each must absorb.

For example, in the 135 LMI countries, donors currently contribute **25% ($305.5 million)** of total spending on supplies (Figure 10). In order to keep pace with the demand for supplies under Scenario A, they must spend at least **$81.7 million** more in 2020 just to maintain their **25%** share of total spending (Table 5).

Under Scenario B, donors must contribute an additional **$137.3 million** (**$442.8 million** total) in 2020 to maintain their **25%** share.

**FIGURE 10. SPENDING REQUIRED IN 2020 SCALED TO MAINTAIN CURRENT PERCENTAGE CONTRIBUTIONS**
135 LMI COUNTRIES: SCENARIOS A & B



## TABLE 5. SPENDING REQUIRED IN 2020 SCALED TO MAINTAIN CURRENT PERCENTAGE CONTRIBUTIONS

## 135 LMI COUNTRIES: SCENARIOS A & B

| SCENARIO A | SHARE OF SPENDING IN 2014 | | SCALED SHARE OF COST IN 2020 | | ADDITIONAL AMOUNT REQUIRED IN 2020 TO MAINTAIN SHARE |
|---|---|---|---|---|---|
| **Total amount** | **$ 1,203,000,000** | **100%** | **$ 1,525,000,000** | **100%** | **$ 322,000,000** |
| **Public Sector \| Donors + Governments** | **$ 508,400,000** | **42%** | **$ 644,400,000** | **42%** | **$ 136,000,000** |
| Donors only | $ 305,500,000 | 25% | $ 387,200,000 | 25% | $ 81,700,000 |
| Governments only | $ 202,900,000 | 17% | $ 257,200,000 | 17% | $ 54,300,000 |
| **Individuals OOP Expenditures** | **$ 694,900,000** | **58%** | **$ 880,900,000** | **58%** | **$ 186,000,000** |

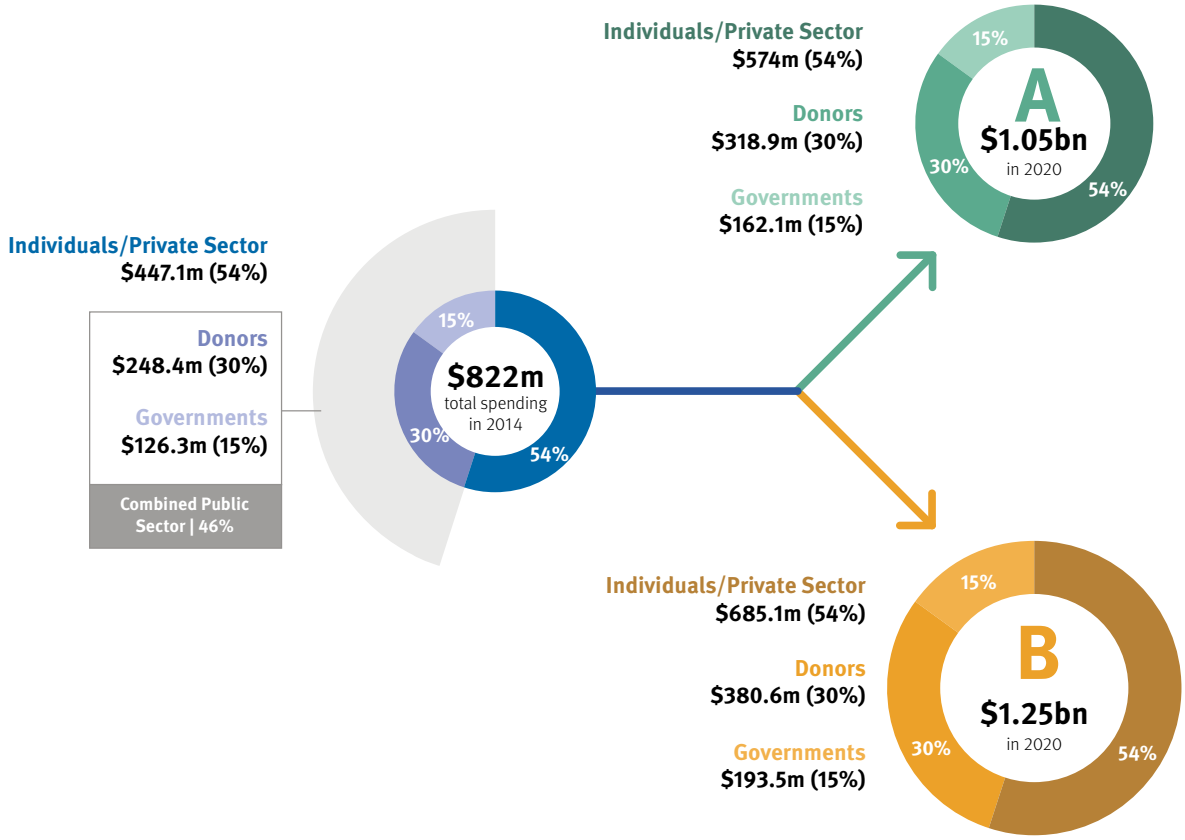
| SCENARIO B | SHARE OF SPENDING IN 2014 | | SCALED SHARE OF COST IN 2020 | | ADDITIONAL AMOUNT REQUIRED IN 2020 TO MAINTAIN SHARE |
|---|---|---|---|---|---|
| **Total amount** | **$ 1,203,000,000** | **100%** | **$ 1,744,000,000** | **100%** | **$ 541,000,000** |
| **Public Sector \| Donors + Governments** | **$ 508,400,000** | **42%** | **$ 737,000,000** | **42%** | **$ 228,600,000** |
| Donors only | $ 305,500,000 | 25% | $ 442,800,000 | 25% | $ 137,300,000 |
| Governments only | $ 202,900,000 | 17% | $ 294,100,000 | 17% | $ 91,200,000 |
| **Individuals OOP Expenditures** | **$ 694,900,000** | **58%** | **$ 1,007,000,000** | **58%** | **$ 312,100,000** |

Across the 69 FP2020 focus countries, spending by donors amounted to **$248.4 million** in 2014. This was **30%** of total spending; we attribute the remainder to governments using non-donor funds (**15%**) and out-of-pocket spending by individuals who purchased supplies through the private sector (**54%**).

Under Scenario A, the supplies that would be consumed by all users of contraception in the year 2020 cost **$1.055 billion**. Scaling up donor funding to maintain a **30%** share of the total cost calls for **$318.9 million** – **$70.5 million** more than donors spent on supplies in 2014.

If the FP2020 goal were achieved (Scenario B), the supplies consumption cost in 2020 would be **$1.259 billion** (Figure 11). For donors to provide a **30%** share of this cost, they would have to spend **$380.6 million** – **$132.2** million more than they spent on supplies in 2014 (Table 6).

**FIGURE 11. SPENDING REQUIRED IN 2020 SCALED TO MAINTAIN CURRENT PERCENTAGE CONTRIBUTIONS**
69 FP2020 FOCUS COUNTRIES: SCENARIOS A & B



## TABLE 6. SPENDING REQUIRED IN 2020 SCALED TO MAINTAIN CURRENT PERCENTAGE CONTRIBUTIONS

## 69 FP2020 FOCUS COUNTRIES: SCENARIOS A & B

| SCENARIO A | SHARE OF SPENDING IN 2014 | | SCALED SHARE OF COST IN 2020 | | ADDITIONAL AMOUNT REQUIRED IN 2020 TO MAINTAIN SHARE |
|---|---|---|---|---|---|
| **Total amount** | **$ 821,800,000** | **100%** | **$ 1,055,000,000** | **100%** | **$ 233,200,000** |
| **Public Sector \| Donors + Governments** | **$ 374,700,000** | **46%** | **$ 481,000,000** | **46%** | **$ 106,300,000** |
| Donors only | $ 248,400,000 | 30% | $ 318,900,000 | 30% | $ 70,500,000 |
| Governments only | $ 126,300,000 | 15% | $ 162,100,000 | 15% | $ 35,800,000 |
| **Individuals OOP Expenditures** | **$ 447,100,000** | **54%** | **$ 574,000,000** | **54%** | **$ 126,900,000** |

| SCENARIO A | SHARE OF SPENDING IN 2014 | | SCALED SHARE OF COST IN 2020 | | ADDITIONAL AMOUNT REQUIRED IN 2020 TO MAINTAIN SHARE |
|---|---|---|---|---|---|
| **Total amount** | **$ 821,800,000** | **100%** | **$ 1,259,000,000** | **100%** | **$ 437,200,000** |
| **Public Sector \| Donors + Governments** | **$ 374,700,000** | **46%** | **$ 574,100,000** | **46%** | **$ 199,400,000** |
| Donors only | $ 248,400,000 | 30% | $ 380,600,000 | 30% | $ 132,200,000 |
| Governments only | $ 126,300,000 | 15% | $ 193,500,000 | 15% | $ 67,200,000 |
| **Individuals OOP Expenditures** | **$ 447,100,000** | **54%** | **$ 685,100,000** | **54%** | **$ 238,000,000** |

# Cost burden shift if public sector funding does not increase

As noted earlier, we cannot predict whether donors and governments will increase the absolute amount of public sector funding for supplies. If increases are not forthcoming and the absolute amount of public sector funding for supplies remains constant between 2014 and 2020, its relative contribution will drop and a greater cost burden will fall to out-of-pocket spending by individuals.

In the 135 LMI countries, the public sector contributed **42%** (**$508.4 million**) to total supplies spending in 2014. In 2020, under Scenario A, this amount would represent just **33%** of the total supplies consumption cost; under Scenario B, it would account for just **29%**. The balance – **$1.017 billion** under Scenario A and **$1.235 billion** under Scenario B – would come from individual out-of-pocket spending (Figures 12 and 13; Table 7).

**FIGURE 12. SHIFTS IN THE DISTRIBUTION OF COST IN 2020**
135 LMI COUNTRIES: SCENARIO A

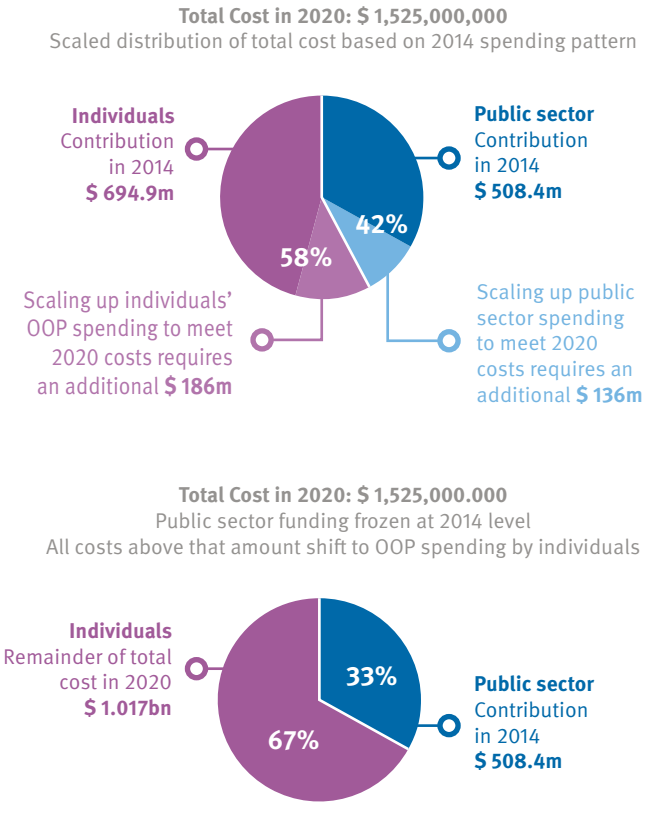



**FIGURE 13. SHIFTS IN THE DISTRIBUTION OF COST IN 2020**
135 LMI COUNTRIES: SCENARIO B

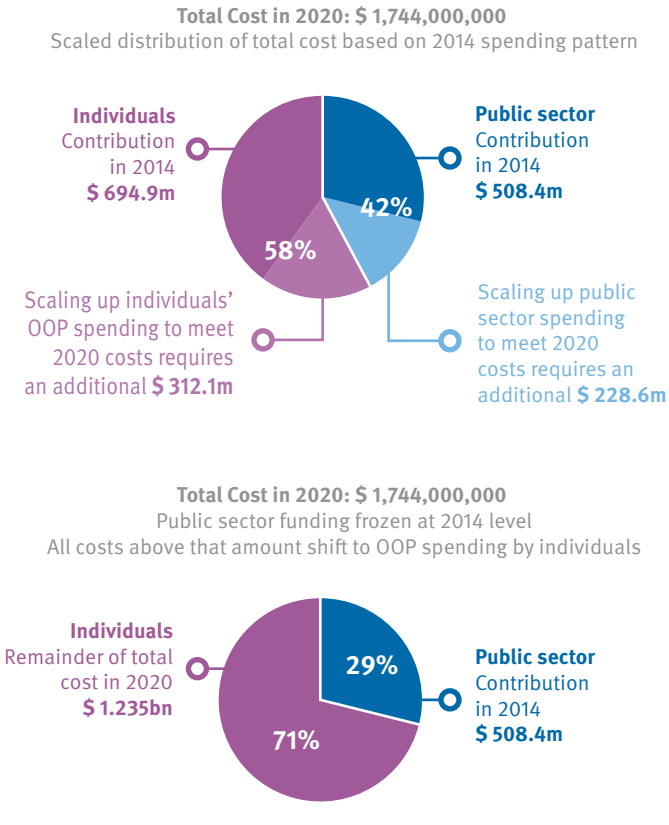



**TABLE 7. COST BURDEN SHIFT IN 2020 IF PUBLIC SECTOR SPENDING STALLS AT 2014 LEVELS**
**135 LMI COUNTRIES: SCENARIOS A & B**

| | Scenario A | | Scenario B | |
|---|---|---|---|---|
| **Total cost in 2020** | **$ 1,525,000,000** | | **$ 1,744,000,000** | |
| | **Public Sector** | **Individuals** | **Public Sector** | **Individuals** |
| **Contribution at 2014 level** | **$ 508,400,000** | **$ 694,900,000** | **$ 508,400,000** | **$ 694,900,000** |
| Scaled increase to meet 2020 costs | - | $ 186,000,000 | - | $ 312,100,000 |
| Remainder of 2020 costs | - | $ 136,000,000 | - | $ 228,600,000 |
| **Total contribution to cost in 2020** | **$ 508,400,000** | **$ 1,017,000,000** | **$ 508,400,000** | **$ 1,235,000,000** |

Across the 69 FP2020 focus countries, the public sector's **$374.7 million** contribution – which represents **46%** of total spending on supplies in 2014 – would in 2020 cover only **36%** of the supplies consumption cost under Scenario A. The balance – **$680.3 million** – would be borne by individuals spending out-of-pocket for supplies. Under Scenario B, the public sector contribution at 2014 levels would amount to just **30%** of the total cost in 2020; the burden on individual out-of-pocket spending would be nearly **$885 million** (Figures 14 and 15; Table 8).

It is often assumed that funding shortfalls in the public sector will ultimately be compensated for by out-of-pocket spending. While this may be true to a certain extent, the potential magnitude of the shortfall under Scenario B calls into question the feasibility of this solution. Without funding increases from the public sector, achieving the FP2020 goal would require individual out-of-pocket spending on supplies in the world's lowest-income countries to nearly double over six years; an additional **$437 million** in out-of-pocket spending would be needed in the year 2020 alone.

**FIGURE 14. SHIFTS IN THE DISTRIBUTION OF COST IN 2020**
69 FP2020 FOCUS COUNTRIES: SCENARIO A

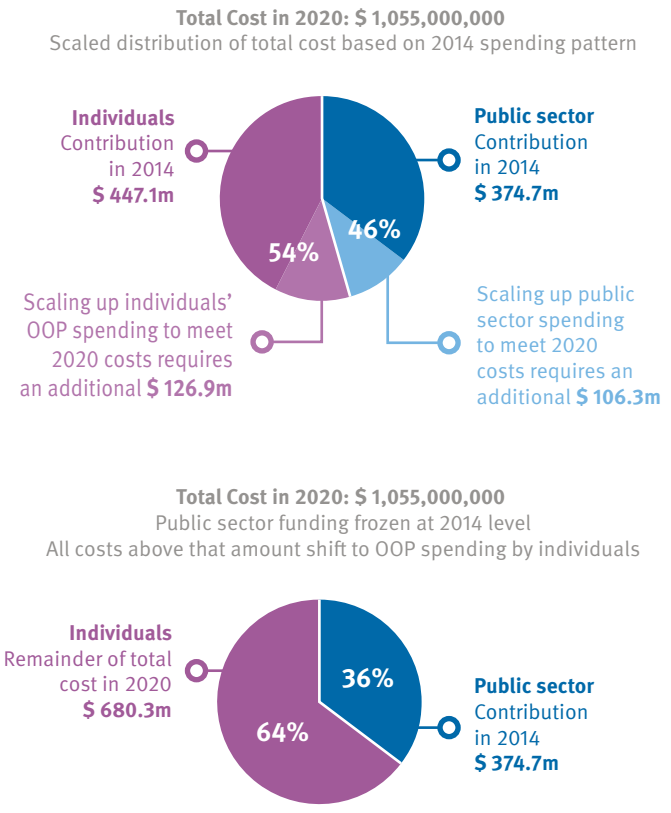



**FIGURE 15. SHIFTS IN THE DISTRIBUTION OF COST IN 2020**
69 FP2020 FOCUS COUNTRIES: SCENARIO B

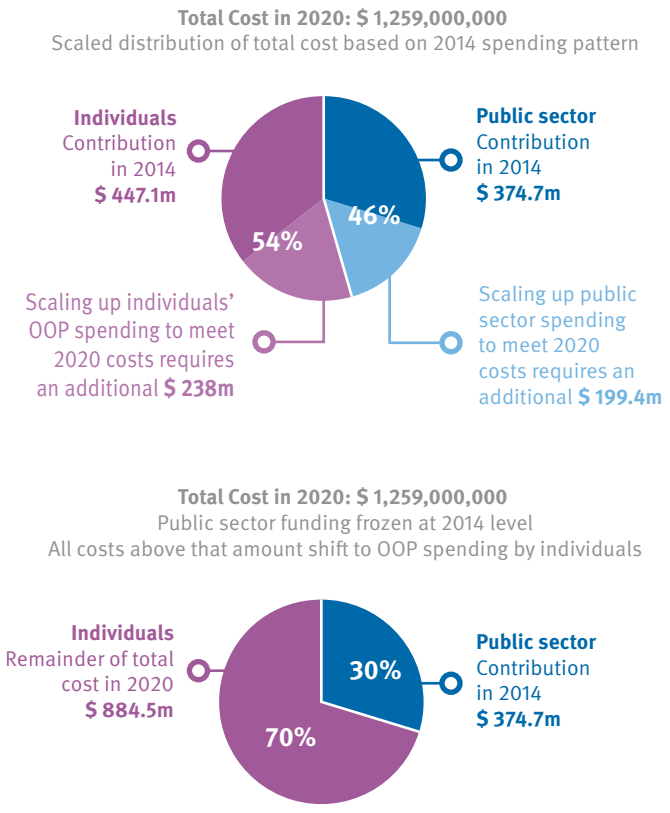



**TABLE 8. COST BURDEN SHIFT IN 2020 IF PUBLIC SECTOR SPENDING STALLS AT 2014 LEVELS**
**69 FP2020 FOCUS COUNTRIES: SCENARIOS A & B**

| | Scenario A | | Scenario B | |
|---|---|---|---|---|
| **Total cost in 2020** | $ 1,055,000,000 | | $ 1,259,000,000 | |
| | Public Sector | Individuals | Public Sector | Individuals |
| **Contribution at 2014 level** | **$ 374,700,000** | **$ 447,100,000** | **$ 374,700,000** | **$ 447,100,000** |
| Scaled increase to meet 2020 costs | - | $ 126,900,000 | - | $ 238,000,000 |
| Remainder of 2020 costs | - | $ 106,300,000 | - | $ 199,400,000 |
| **Total contribution to cost in 2020** | **$ 374,700,000** | **$ 680,300,000** | **$ 374,700,000** | **$ 884,500,000** |

# SECTION 3

# Analysis of Procurement Costs and Funding Gaps

In this section, we explore a different kind of analysis; one that looks at procurement needs and how many products to order, when they are scheduled to arrive, and where they must go. The procurement analysis takes into account both the consumption needs of individual clients and the presence of inventory held at stock points throughout the supply chain. This inventory helps buffer against demand uncertainty to ensure uninterrupted supply and continuous availability at all SDPs.

The Reproductive Health Supplies Coalition is committed to ensuring that all women have access to high-quality contraceptive supplies whenever and wherever they seek family planning services. Meeting this commitment requires both long range and short term planning to guarantee there are sufficient commodities at each level of the supply chain so that service delivery points (SDPs) can offer users the method of their choice.

Elsewhere in this report we present estimates of consumption quantities based on country data from a variety of sources (including DHS, MICS, PMA2020, and services statistics from HMIS systems) collected over many years up to and including 2015. The data allow us to identify trends in contraceptive use, and these trends are the basis of our consumption quantity and cost projections to the year 2020. This information is critical to evaluating our progress-to-date, and to making longer term programmatic, manufacturing, and funding decisions.

In this section, we explore a different kind of analysis; one that looks at procurement needs and how many products to order, when they are scheduled to arrive, and where they must go. The procurement analysis takes into account both the consumption needs of individual clients and the presence of inventory held at stock points throughout the supply chain. This inventory helps buffer against demand uncertainty to ensure uninterrupted supply and continuous availability at all SDPs.

The analysis presented in this section was prepared by a group of experts from CHAI and JSI. It examines the public sector procurement needs of twenty countries and projects the amount of public sector funding required to meet future procurement requests. The analysis is based on information contained in governments' public sector quantification reports and supply plans.

## Insights from country quantification reports

Government quantification reports provide a record of the process through which Ministries of Health determine the volume of products they want to procure for specific programs or services, when the products must arrive, and how much the procurement will cost. Quantification reports are rich sources of information that can be used to inform predictions of a government's future procurement requests and funding needs. Such analyses are highly country-specific, as factors like the number of stock-points, the length of the supply pipeline, the quantities of stock on hand, and the products and methods included in the public sector method mix vary by country. Quantification exercises and reports are not standardized across countries; they vary by the types of data and forecast methodologies used, the periods of time covered, and the frequency with which new data are introduced and estimates are revised. In some cases, new data are introduced and estimates are revised every six months.

The results of quantification exercises represent each government's own assessment of what it needs to procure based on agreed-upon rates of growth and scale-up in provision of family planning in the public sector. Despite the specificity and time-sensitive nature of quantification reports and supply plans, the CHAI-JSI team developed a standardized approach that extrapolates procurement needs over an extended period of time (in this case, 2016 to 2020). A description of their methodology can be found in Section 7, Notes on Methodologies and Data Sources, page 86.

While the practical advantages of the country- and time-specific nature of quantification exercises are clear, visibility is limited, and confidentiality agreements prevent the disclosure of estimates for individual countries. Therefore, this report presents aggregate totals for twenty countries from which the CHAI-JSI team could obtain quantification reports that met inclusion requirements. The quality of individual quantification reports was not assessed as part of this analysis to validate the results.

# Findings: public sector procurement funding for 20 countries

The twenty countries included in the CHAI-JSI procurement analysis are Bangladesh, Burkina Faso, Cameroon, DR Congo, Côte d'Ivoire, Ethiopia, Ghana, Kenya, Lao PDR, Liberia, Malawi, Mauritania, Mozambique, Niger, Nigeria, Rwanda, Senegal, Tanzania, Togo, and Uganda. For each country except Nigeria, two consecutive years of forecast data were available, one of which was 2016 (Nigeria only conducts one-year forecasts, so supplemental data sources were used).

All 20 countries are FP2020 focus countries, and all included five of the six most prevalent contraceptive methods in their procurement estimates (implants, injectables, IUDs, pills, and male condoms were included; male and female sterilization was excluded). In addition, 17 countries included female condoms, 14 included EC, and 11 included SDM. Some of the countries included male condoms needed both for family planning and HIV programs; others included male condoms for family planning programs only.

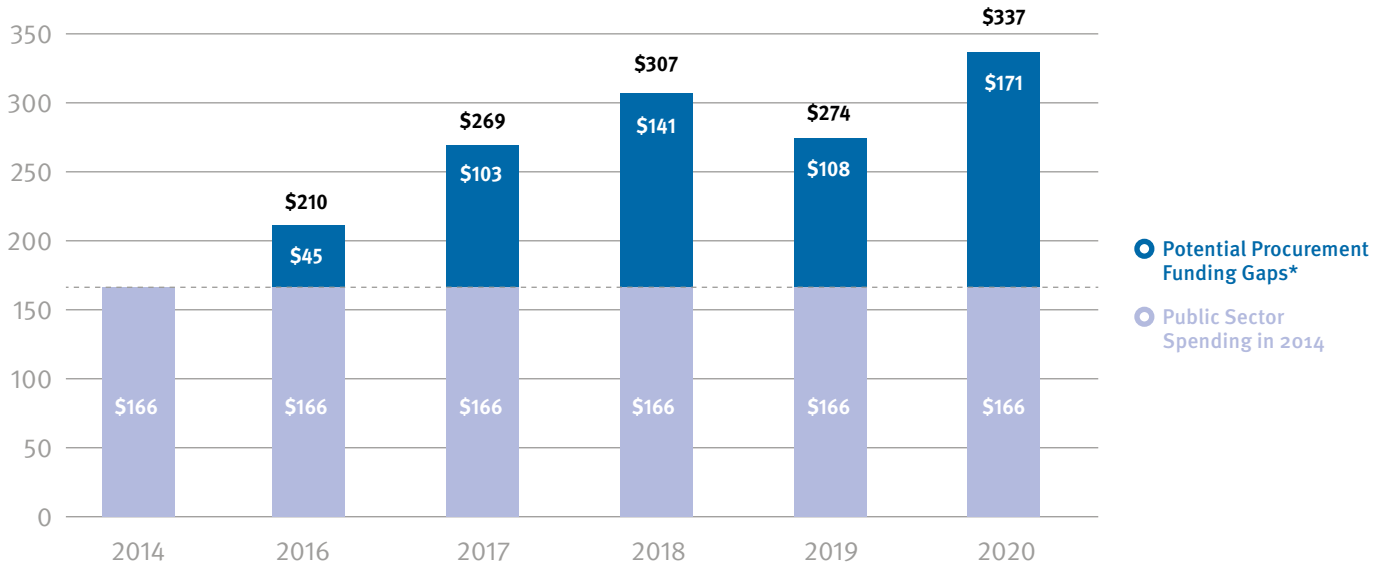
CHAI-JSI estimated that the total funding needed for public sector procurement in all 20 countries was **$210 million** in 2016 (Figure 16). In 2020, they estimate that the total public sector procurement funding need will be **$337 million**. Cumulatively, for the years 2016 – 2020, the funding needed for public sector procurement across the twenty countries is **$1.397 billion**.

To anticipate potential funding gaps, we compared these estimates to the amount the public sector (donors plus the governments of the twenty countries combined) spent on supplies in 2014, which was nearly **$166 million** (it is important to note, however, that public sector funding represents only about half of total spending on contraceptives across the 20 countries).

The comparison of the amount of public sector spending on supplies across the twenty countries in 2014 ($166 million) to the public sector procurement cost estimates calculated by the CHAI-JSI team points to a funding gap of **$45 million** in 2016.

By 2020, the public sector funding gap nearly quadruples in size at **$171 million** for that year alone. Cumulatively, the public sector procurement funding gap for the twenty countries over five years is **$568 million**.

**FIGURE 16. ESTIMATED PUBLIC SECTOR PROCUREMENT FUNDING GAPS FOR 20 COUNTRIES**




* Includes commodities and freight. All estimates are in millions

## Consumption versus procurement quantities

Procurement quantities differ from consumption quantities insofar as they account not only for the products that will be consumed by individuals but also for inventory required at stock points throughout the supply chain. This inventory helps buffer against demand uncertainty and ensures uninterrupted supply and continuous availability and user choice at SDPs. There is no average factor or percentage to apply across countries as procurement quantities depend on the length of the supply pipeline in each country, inventory management policies, and stock on hand or orders in progress, which in some instances may mean that procurement quantities are lower than forecast consumption.

Research conducted by JSI as part of the InSupply project[23] on the relationship between implant procurement and insertion rates has found that high quantities of inventory / procurements are necessary to fill the supply pipelines, both when a product is first introduced, and as consumption grows rapidly. This does not, in the views of the project, represent excess stock compared to the number of insertions:

> *For inventory to be available for a given insertion, the entire pipeline must be filled ahead of time. For Ethiopia, this means that 18 months of inventory must be available throughout the supply chain nodes on the day of insertion, to account for demand volatility at each point in the supply chain and ensure inventory is available at all SDPs.*
>
> *For example, in order to meet 26,315 clients' needs in June 2012, 473,677 units need to be in the pipeline. Since the pipeline is 18 months long, all relevant procurements must have been completed in January 2011 to flow through the supply chain and be available at the SDP in June 2012.*
>
> *Higher levels of procurement are needed to fill the pipeline as consumption is increasing. Eventually, as consumption stabilizes, and if the pipeline is filled, insertion levels will start to equal procurement figures.*
>
> *The number of stocking points can change dramatically over several years, which would also affect the volumes required to fill the pipeline to each point. In Ethiopia, there were 2,500 SDPs in 2003; by 2015, the number had grown to more than 19,400 – each of which requires sufficient inventory.*

# SECTION 4

## Findings for 135 low- and middle-income countries

135 LMI COUNTRIES | SCENARIO A | SCENARIO B

# The path to 2020 | Scenario A

Scenario A uses countries' current growth patterns to calculate median estimates of the number of contraceptive users in future years. This is a conservative approach that assumes there will be no appreciable deviation from current country trajectories with respect to growth in numbers of new users.

Our starting point is the total number of women using modern methods of contraception who were living in the 135 LMI countries in 2016: **452.7 million**.

Under Scenario A, this number will grow to **490.3 million** in 2020, an increase of **37.6 million** users of contraception (Table 9).

While the total number of users increases each year, shifts in method mix result in a greater number of users of some methods and fewer users of others.

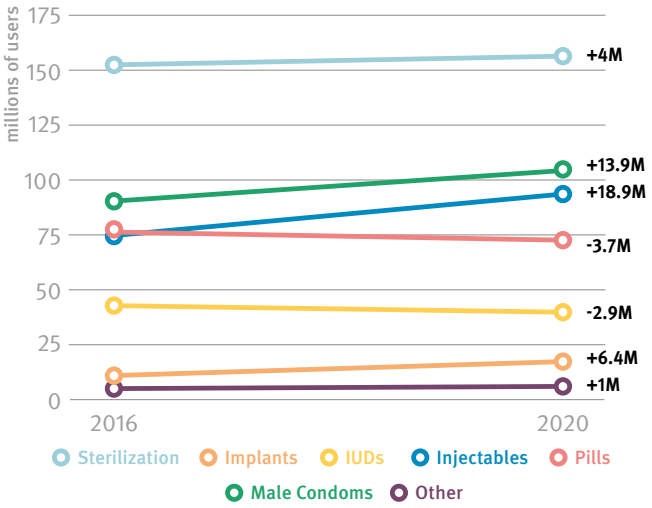
**TABLE 9. NUMBER OF USERS OF EACH CONTRACEPTIVE METHOD, 2016 - 2020**
**135 LMI COUNTRIES: SCENARIO A**

| * Estimates in millions | 2016 | 2017 | 2018 | 2019 | 2020 | CHANGE (2016 - 2020) | |
|---|---|---|---|---|---|---|---|
| **All Methods** | **452.7** | **461.7** | **471.6** | **480.9** | **490.3** | **37.6** | **8%** |
| Sterilization | 152.4 | 153.4 | 154.7 | 155.6 | 156.4 | 4.0 | 3% |
| Implants | 10.9 | 12.4 | 14.0 | 15.6 | 17.3 | 6.4 | 58% |
| IUDs | 42.8 | 42.1 | 41.3 | 40.6 | 39.8 | (2.9) | -7% |
| Injectables | 74.6 | 79.2 | 84.0 | 88.7 | 93.6 | 18.9 | 25% |
| Pills | 76.3 | 75.5 | 74.6 | 73.6 | 72.6 | (3.7) | -5% |
| Male Condoms | 90.3 | 93.6 | 97.1 | 100.7 | 104.3 | 13.9 | 15% |
| Other | 5.0 | 5.2 | 5.5 | 5.8 | 6.0 | 1.0 | 20% |

Under Scenario A, the number of users of implants will grow by **58%**, from **10.9 million** in 2016 to **17.3 million** in 2020, while the number of users of IUDs and pills will decrease by **-7%** and **-5%** respectively. This is a net reduction of **2.9 million** IUD users and **3.7 million** pill users by the year 2020 (Figure 17).

The decrease in the number of users of IUDs and pills mirrors patterns seen from survey data in many countries, suggesting that growth in some methods (notably implants and injectables) will be driven both by increases in overall users as well as existing users switching away from other methods.

**FIGURE 17. CHANGE IN NUMBER OF USERS PER METHOD, 2016-2020**
**135 LMI COUNTRIES: SCENARIO A**




As shown in Table 10, the share of method mix represented by sterilization will decrease by two percentage points between 2016 and 2020, but it will still be the most prevalent method: roughly one out of three users of contraception will still be women who rely on sterilization.

Mirroring the absolute increases in the number of users of both injectables and implants, these methods will also see the largest increases in their shares of the method mix. Injectables will increase by three percentage points, and implants will increase by two percentage points between 2016 and 2020.

"Other" methods of contraception represent just **1%** of method mix. Aggregated across 135 countries, however, this **1%** equates to **5 million** users in 2016 and **6 million** users in 2020.

**TABLE 10. METHOD MIX, 2016 - 2020**
**135 LMI COUNTRIES: SCENARIO A**

| | 2016 | 2017 | 2018 | 2019 | 2020 |
|---|---|---|---|---|---|
| Sterilization | 34% | 33% | 33% | 32% | 32% |
| Implants | 2% | 3% | 3% | 3% | 4% |
| IUDs | 9% | 9% | 9% | 8% | 8% |
| Injectables | 16% | 17% | 18% | 18% | 19% |
| Pills | 17% | 16% | 16% | 15% | 15% |
| Male Condoms | 20% | 20% | 21% | 21% | 21% |
| Other | 1% | 1% | 1% | 1% | 1% |

# Quantity and cost of supplies consumed by users of contraception

As the number of users of each contraceptive method changes from 2016 to 2020 in Scenario A, so too does the volume of supplies we anticipate these users would consume.

Our analysis does not project future changes in the price of contraceptive commodities and associated clinical supplies, nor does it include the cost of freight (see explanation on page 85). Therefore, the changes in the cost of supplies shown under Scenarios A and B relate directly to the changes in the volume of supplies required by the users of each method (Table 11).

**TABLE 11. CONSUMPTION QUANTITIES FOR EACH CONTRACEPTIVE METHOD, 2016 - 2020**
**135 LMI COUNTRIES: SCENARIO A**

| * Estimates in millions | 2016 | 2017 | 2018 | 2019 | 2020 | CUMULATIVE TOTAL | CHANGE (2016 - 2020) | |
|---|---|---|---|---|---|---|---|---|
| Sterilization | 12.8 | 12.9 | 13.0 | 13.0 | 13.1 | 65.0 | 0.3 | 3% |
| Implants | 4.3 | 4.8 | 5.3 | 5.9 | 6.5 | 27.0 | 2.2 | 51% |
| IUDs | 9.7 | 9.5 | 9.3 | 9.2 | 9.0 | 46.9 | (0.7) | -7% |
| Injectables | 309.4 | 328.4 | 347.7 | 357.4 | 387.2 | 1,740.0 | 77.8 | 25% |
| Pills | 1,069.0 | 1,057.0 | 1,045.0 | 1,031.0 | 1,016.0 | 5,220.0 | (52.9) | -5% |
| Male Condoms | 6,957.0 | 7,209.0 | 7,383.0 | 7,755.0 | 8,033.0 | 37,440.0 | 1,076.0 | 15% |
| Other | 58.0 | 61.3 | 65.3 | 69.5 | 74.6 | 328.9 | 16.5 | 28% |

In 2016, users of contraception in the 135 LMI countries consumed contraceptive supplies valued at **$1.352 billion** (Table 12). Under Scenario A, the total consumption cost will grow to **$1.525 billion** in 2020. This is an increase of **$173 million**, or **13%**.

The method with the greatest growth in consumption cost, based solely on the increasing quantity required by users from 2016 to 2020, is implants at **51%**. IUDs show the steepest decline in consumption cost at **-24%**.

**TABLE 12. CONSUMPTION COSTS FOR EACH CONTRACEPTIVE METHOD, 2016 - 2020**
**135 LMI COUNTRIES: SCENARIO A**

| * Estimates in millions | 2016 | 2017 | 2018 | 2019 | 2020 | CUMULATIVE TOTAL | CHANGE (2016 - 2020) | |
|---|---|---|---|---|---|---|---|---|
| **All Methods** | **$ 1,352.0** | **$ 1,394.0** | **$ 1,438.0** | **$ 1,481.0** | **$ 1,525.0** | **$ 7,191.0** | **$ 173.2** | **13%** |
| Sterilization | $ 43.6 | $ 43.9 | $ 44.2 | $ 44.5 | $ 44.7 | $ 221.0 | $ 1.1 | 3% |
| Implants | $ 46.2 | $ 51.5 | $ 57.3 | $ 63.3 | $ 69.5 | $ 288.0 | $ 23.3 | 51% |
| IUDs | $ 26.0 | $ 24.4 | $ 22.9 | $ 21.3 | $ 19.8 | $ 114.6 | $ (6.1) | -24% |
| Injectables | $ 544.8 | $ 577.8 | $ 611.3 | $ 645.4 | $ 679.8 | $ 3,059.0 | $ 135.0 | 25% |
| Pills | $ 513.0 | $ 511.4 | $ 509.7 | $ 507.3 | $ 504.0 | $ 2,545.0 | $ (9.0) | -2% |
| Male Condoms | $ 162.3 | $ 168.1 | $ 174.4 | $ 180.6 | $ 186.9 | $ 872.5 | $ 24.5 | 15% |
| Other | $ 15.9 | $ 16.8 | $ 17.9 | $ 19.0 | $ 20.2 | $ 90.0 | $ 4.3 | 27% |

## Sterilization

In 2016, **152.4 million** women in the 135 LMI countries relied on sterilization as their contraceptive method. Sterilization represented **34%** of the method mix. There were **12.8 million** sterilization kits used during procedures performed in 2016; the cost for this quantity of kits was **$43.6 million** (Table 13).

The number of women who rely on sterilization as their contraceptive method in a given year is not the same as the number of sterilization procedures performed during the same year. This is because sterilizations performed in prior years contribute to the current year's total number of women who rely on sterilization. The sterilizations performed in the current year contribute to the total number of users in subsequent years, just as the number of women who age out of the category of contraceptive users in the current year subtracts from the total number of users in subsequent years. Similarly, women who rely on implants and IUDs inserted during a previous year have no implant or IUD consumption requirements in the current year.

Under Scenario A, the number of women who rely on sterilization in the 135 LMI countries will grow to **156.4 million** in 2020 (an increase of **4 million**). The consumption quantity of sterilization kits in 2020 will increase by **330,000**, to **13.1 million**, at a total cost of **$44.7 million**. Despite these increases, sterilization's share of method mix in 2020 (**32%**) will be slightly lower than in 2016 (**34%**).

**TABLE 13. STERILIZATION** — **135 LMI COUNTRIES, SCENARIO A**

| * Estimates in millions | 2016 | 2017 | 2018 | 2019 | 2020 | CUMULATIVE TOTAL | CHANGE 2016 - 2020 | |
|---|---|---|---|---|---|---|---|---|
| Number of users | 152.4 | 153.4 | 154.7 | 155.6 | 156.4 | | 4.0 | 3% |
| Method mix share | 34% | 33% | 33% | 32% | 32% | | | |
| Consumption quantity | 12.8 | 12.9 | 13.0 | 13.0 | 13.1 | 65.0 | 0.3 | 3% |
| Consumption cost | $ 43.6 | $ 43.9 | $ 44.2 | $ 44.5 | $ 44.7 | $ 221.0 | $ 1.1 | 3% |

## Implants

In 2016, **10.9 million** women living in the 135 LMI countries used contraceptive implants (Table 14). Of this total, **4.3 million** had their implants inserted in 2016; the remaining **5.7 million** received their implants in previous years. Implants represented **2%** of the method mix in 2016. The cost of the **4.3 million** implants consumed that year was **$46.2 million**.

Under Scenario A, implants will double their share of the method mix in 2020 (**4%**). **6.5 million** additional women will use implants in 2020 compared to 2016. The cost of the quantity of implants consumed in 2020 will be **$69.5 million**, an increase of **$23.3 million** over the cost in 2016.

The annual consumption quantities of implants projected under Scenario A differ from the annual estimates of implant procurement quantities. As noted elsewhere in this report, procurement quantities may reflect a number of additional factors including the amount necessary to maintain optimal stock levels at every distribution point, the amount already present in the system, and/or amounts required for planned program expansions.

**TABLE 14. IMPLANTS** — **135 LMI COUNTRIES, SCENARIO A**

| * Estimates in millions | 2016 | 2017 | 2018 | 2019 | 2020 | CUMULATIVE TOTAL | CHANGE 2016 - 2020 | |
|---|---|---|---|---|---|---|---|---|
| Number of users | 10.9 | 12.4 | 14 | 15.6 | 17.3 | | 6.4 | 58% |
| Method mix share | 2% | 3% | 3% | 3% | 4% | | | |
| Consumption quantity | 4.3 | 4.8 | 5.3 | 5.9 | 6.5 | 27.0 | 2.2 | 51% |
| Consumption cost | $ 46.2 | $ 51.5 | $ 57.3 | $ 63.3 | $ 69.5 | $ 288.0 | $ 23.3 | 51% |

## IUDs

In 2016, there were **42.8 million** women living in the 135 LMI countries who used IUDs as their method of contraception (Table 15). IUDs represented **9%** of the method mix. Insertions performed in 2016 required **9.7 million** IUDs at a cost of **$26 million**.

In 2020, in Scenario A, the number of users of IUDs will decline by **7%** to **39.8 million**. IUDs will represent a slightly smaller share of method mix (**8%**). The number of insertions will decline as well; in 2020, users will consume **9 million IUDs**, at a cost of **$19.8 million** (**24%** less than the cost in 2016).

**TABLE 15. IUDS** — **135 LMI COUNTRIES, SCENARIO A**

| * Estimates in millions | 2016 | 2017 | 2018 | 2019 | 2020 | CUMULATIVE TOTAL | CHANGE 2016 - 2020 | |
|---|---|---|---|---|---|---|---|---|
| Number of users | 42.8 | 42.1 | 41.3 | 40.6 | 39.8 | | (2.9) | -7% |
| Method mix share | 9% | 9% | 9% | 8% | 8% | | | |
| Consumption quantity | 9.7 | 9.5 | 9.3 | 9.2 | 9.0 | 46.9 | (0.7) | -7% |
| Consumption cost | $ 26.0 | $ 24.4 | $ 22.9 | $ 21.3 | $ 19.8 | $ 114.6 | $ (6.1) | -24% |

## Injectables

In 2016, there were **74.6 million** women living in the 135 LMI countries who relied on injectables as their method of contraception (Table 16). Injectables represented **16%** of the method mix. Women consumed **309.4 million** injectables at a cost of **$544.8 million**. This was **40%** of the total cost of all contraceptive supplies consumed by the users of all methods in 2016.

Under Scenario A, the number of users of injectables will grow to **93.6 million** in 2020, an increase of **25%** over 2016. Injectables will represent **19%** of the method mix in 2020. Women will consume **387.2 million** injectables, which is **77.8 million** more than were consumed in 2016. The cost of these injectables is nearly **$680 million** (an increase of **$135 million** over the 2016 consumption cost). This amounts to **45%** of the total cost of all contraceptive supplies consumed by the users of all methods in 2020.

**TABLE 16. INJECTABLES** — **135 LMI COUNTRIES, SCENARIO A**

| * Estimates in millions | 2016 | 2017 | 2018 | 2019 | 2020 | CUMULATIVE TOTAL | CHANGE 2016 - 2020 | |
|---|---|---|---|---|---|---|---|---|
| Number of users | 74.6 | 79.2 | 84.0 | 88.7 | 93.6 | | 18.9 | 25% |
| Method mix share | 16% | 17% | 18% | 18% | 19% | | | |
| Consumption quantity | 309.4 | 328.4 | 347.7 | 367.4 | 387.2 | 1,740.0 | 77.8 | 25% |
| Consumption cost | $ 544.8 | $ 577.8 | $ 611.3 | $ 645.4 | $ 679.8 | $ 3,059.0 | $135.0 | 25% |

## Pills

In 2016, there were **76.3 million** users of contraceptive pills living in the 135 LMI countries (Table 17). Pills represented **17%** of the method mix. Women consumed nearly **1.07 billion** cycles of pills in 2016, at a cost of **$513 million**.

Under Scenario A, the number of users of contraceptive pills in 2020 will be **72.6 million**; this is **3.7 million** less than in 2016. The share of method mix represented by pills will decline slightly, to **15%**. Women will still consume more than **1 billion** pill cycles in 2020, but the consumption cost declines to **$504 million** (**$9 million** less than in 2016).

**TABLE 17. PILLS** — **135 LMI COUNTRIES, SCENARIO A**

| * Estimates in millions | 2016 | 2017 | 2018 | 2019 | 2020 | CUMULATIVE TOTAL | CHANGE 2016 - 2020 | |
|---|---|---|---|---|---|---|---|---|
| Number of users | 76.3 | 75.5 | 74.6 | 73.6 | 72.6 | | (3.7) | -5% |
| Method mix share | 17% | 16% | 16% | 15% | 15% | | | |
| Consumption quantity | 1,069.0 | 1,057.0 | 1,045.0 | 1,031.0 | 1,016.0 | 5,220.0 | (52.9) | -5% |
| Consumption cost | $ 513.0 | $ 511.4 | $ 509.7 | $ 507.3 | $ 504.0 | $ 2,545.0 | $ (9.0) | -2% |

## Male condoms

In 2016, **90.3 million** women living in 135 LMI countries relied on their partners' use of male condoms as their method of contraception (Table 18). Male condoms used for contraception represented **20%** of the method mix. Nearly **7 billion** male condoms were used for contraceptive purposes in 2016, at a cost of **$162.3 million**.

Under Scenario A, the number of women relying on male condoms for contraception will grow to **104.3 million** in 2020, an increase of **15%** compared to 2016. Male condoms used for contraception will represent **21%** of the method mix. More than **8 billion** male condoms will be required for contraceptive purposes in 2020, at a cost of nearly **$187 million**.

**TABLE 18. MALE CONDOMS** — **135 LMI COUNTRIES, SCENARIO A**

| * Estimates in millions | 2016 | 2017 | 2018 | 2019 | 2020 | CUMULATIVE TOTAL | CHANGE 2016 - 2020 | |
|---|---|---|---|---|---|---|---|---|
| Number of users | 90.3 | 93.6 | 97.1 | 100.7 | 104.3 | | 13.9 | 15% |
| Method mix share | 20% | 20% | 21% | 21% | 21% | | | |
| Consumption quantity | 6,957.0 | 7,209.0 | 7,483.0 | 7,755.0 | 8,033.0 | 37,440.0 | 1,076.0 | 15% |
| Consumption cost | $ 162.3 | $ 168.1 | $ 174.4 | $ 180.6 | $ 186.9 | $ 872.5 | $ 24.5 | 15% |

# The funding gap

In this report we define the contraceptive supplies funding gap in two ways. We define it first as the difference between the value of the supplies consumed by the projected number of users of contraception each year 2016 – 2020, compared to spending on supplies in 2014. Secondly, we define it as the additional amount of spending required by each sector in order to maintain its relative contribution to the whole in line with 2014 funding levels.

Our analysis uses two sets of data:

› Total spending on contraceptive supplies by the public and private sectors at the most recent measurable level (2014) (Table 19).

› Consumption costs each year for 2016 to 2020, as projected in Scenario A. The consumption cost reflects the value of the quantities of supplies consumed directly by users of contraception.

The comparison shows that the amount spent on supplies in 2014 is deficient in every year from 2016 to 2020, in both scenarios, for the group of 135 LMI countries as well as the subset of 69 FP2020 focus countries. This is all the more noteworthy because, as noted previously in Section 3, consumption costs reflect volumes that may be considerably lower than the volumes required for procurement; for this reason and other reasons, our estimates most likely understate future costs.

**TABLE 19. TOTAL SPENDING ON CONTRACEPTIVE SUPPLIES IN 2014**
**135 LOW- AND MIDDLE-INCOME COUNTRIES**

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Total spending on supplies | $ | 1,203,000,000 | | | | | |
| Combined Public Sector | $ | 508,400,000 | 42% | Donors only | $ | 305,500,000 | 25% |
| | | | | Governments only | $ | 202,900,000 | 17% |
| Individuals/Private Sector | $ | 694,900,000 | 58% | | | | |

## All sources / public + private sectors

Across the 135 LMI countries, the cost of the supplies consumed by users of contraception in 2016 was **$1.352 billion** (Table 20). Comparison to total spending on supplies at its most recent known level (**$1.203 billion**) produces a funding gap of nearly **$150 million** in 2016.

Under Scenario A, the supplies consumption cost grows to **$1.525 billion** in 2020. Compared to 2014 spending, this represents a gap of **$322 million** in the resources needed for supplies in 2020 alone.

**TABLE 20. TOTAL SPENDING, COST, AND FUNDING GAP ALL SOURCES (PUBLIC + PRIVATE SECTORS) — 135 LMI COUNTRIES, SCENARIO A**

| * Estimates in millions | 2016 | 2017 | 2018 | 2019 | 2020 | CUMULATIVE (2016 - 2020) |
|---|---|---|---|---|---|---|
| Total spending in 2014 (100%) | $ 1,203 | $ 1,203 | $ 1,203 | $ 1,203 | $ 1,203 | $ 6,016 |
| Total cost each year (100%) | $ 1,352 | $ 1,394 | $ 1,438 | $ 1,481 | $ 1,525 | $ 7,191 |
| **Difference / funding gap** | $ (149) | $ (191) | $ (235) | $ (278) | $ (322) | $ (1,175) |

## Donors

Donor spending on supplies – a subset of public sector spending – includes direct spending on supplies, monetary contributions used to underwrite supply procurement, in–kind contributions of supplies, basket funds provided by donors and used by governments to procure supplies, and World Bank loan funds used to procure supplies. Donor entities in this category include: aid agencies such as DFID and USAID; international institutions such as UNFPA and the World Bank; social marketing groups and INGOs such as IPPF, MSI, and PSI, most of whose procurement is subsidized by donor funding; and philanthropic entities.

In 2014, donors contributed **25%**, or **$305.5 million**, to total spending on supplies (public and private sectors combined) across the 135 LMI countries (Table 21). The supplies consumption cost in 2016 was **$343.2 million**. Maintaining their **25%** share would require donors to spend an additional **$37.7 million** in 2016.

Under Scenario A, maintaining their **25%** share of the consumption cost burden in 2020 would will require donors to spend nearly **$82 million** more than they contributed in 2014. In total, the donor share of the supplies consumption cost in the year 2020 will be more than **$387 million**.

**TABLE 21. SHARE OF SPENDING, COST, AND FUNDING GAP DONORS (PUBLIC SECTOR)** — **135 LMI COUNTRIES, SCENARIO A**

| * Estimates in millions | 2016 | 2017 | 2018 | 2019 | 2020 | CUMULATIVE (2016 - 2020) |
|---|---|---|---|---|---|---|
| Share of spending in 2014 (25%) | $ 305.5 | $ 305.5 | $ 305.5 | $ 305.5 | $ 305.5 | $ 1,527.0 |
| Cost share each year (25%) | $ 343.2 | $ 353.9 | $ 365.0 | $ 376.1 | $ 387.2 | $ 1,825.0 |
| **Difference / funding gap** | **$ (37.7)** | **$ (48.4)** | **$ (59.5)** | **$ (70.6)** | **$ (81.7)** | **$ (298.0)** |

## Governments

This category represents the non-donor portion of public sector funding. It is composed of spending by the governments of the 135 LMI countries using internally generated (non-donor, non-basket fund, and non-World Bank loan) revenue.

Governments contributed **17%**, or close to **$203 million**, of the total amount spent on supplies in 2014 (Table 22). In 2016, **17%** of the supplies consumption cost was **$25 million** greater, or nearly **$228 million**. Under Scenario A, governments would have to spend at least **$257 million** in 2020 alone to continue contributing **17%** of the total cost burden; this is **$54.3 million** more than they spent in 2014.

**TABLE 22. SHARE OF SPENDING, COST, AND FUNDING GAP GOVERNMENTS (PUBLIC SECTOR)** — **135 LMI COUNTRIES, SCENARIO A**

| * Estimates in millions | 2016 | 2017 | 2018 | 2019 | 2020 | CUMULATIVE (2016 - 2020) |
|---|---|---|---|---|---|---|
| Share of spending in 2014 (17%) | $ 202.9 | $ 202.9 | $ 202.9 | $ 202.9 | $ 202.9 | $ 1,014.0 |
| Share of cost each year (17%) | $ 227.9 | $ 235.0 | $ 242.4 | $ 249.8 | $ 257.2 | $ 1,212.0 |
| **Difference / funding gap** | **$ (25.0)** | **$ (32.1)** | **$ (39.5)** | **$ (46.9)** | **$ (54.3)** | **$ (198.0)** |

## Individuals / private sector

This category consists mainly of out-of-pocket (OOP) spending by individuals purchasing their own supplies, and a much smaller amount representing employer-provided health services. In the 135 LMI countries, individuals and the private sector contributed **58%** (nearly **$695 million**) of the total amount spent on contraceptives in 2014 (Table 23).

In 2016, **58%** of the supplies consumption cost in the 135 LMI countries amounted to more than **$780 million**. This is nearly **$86 million** more than we attribute to individual OOP spending in 2014. Under Scenario A, in the year 2020, **58%** of the supplies consumption cost will be more than **$880 million**; this is an increase of **$186 million** compared to the amount spent in 2014.

**TABLE 23. SHARE OF SPENDING, COST, AND FUNDING GAP INDIVIDUALS (PRIVATE SECTOR)** — **135 LMI COUNTRIES, SCENARIO A**

| * Estimates in millions | 2016 | 2017 | 2018 | 2019 | 2020 | CUMULATIVE (2016 - 2020) |
|---|---|---|---|---|---|---|
| Share of spending in 2014 (58%) | $ 694.9 | $ 694.9 | $ 694.9 | $ 694.9 | $ 694.9 | $ 3,474.0 |
| Share of cost each year (58%) | $ 780.8 | $ 805.1 | $ 830.4 | $ 855.7 | $ 880.9 | $ 4,153.0 |
| **Difference / funding gap** | **$ (85.9)** | **$ (110.2)** | **$ (135.5)** | **$ (160.8)** | **$ (186.0)** | **$ (679.0)** |

## Public sector / donors + governments

In 2014, the public sector (donor and country government resources combined) contributed **42%** (**$508.4 million**) of the total amount spent on contraceptive supplies across the 135 LMI countries.

If the public sector is committed to maintaining its **42%** share of total spending as the number of users of contraception (and thus the quantity and cost of the supplies they consume) grows, it would need to spend at least **$62.8 million** more on supplies in 2016 than it did in 2014 (or **$571.2 million** total) (Table 24). In 2020, under Scenario A, the public sector share of the supplies consumption cost is **$644.4 million**. It would require spending an additional **$136 million** just to maintain a **42%** share of the supplies cost burden.

**TABLE 24. SHARE OF SPENDING, COST, AND FUNDING GAP PUBLIC SECTOR (DONORS + GOVERNMENTS)** — **135 LMI COUNTRIES, SCENARIO A**

| * Estimates in millions | 2016 | 2017 | 2018 | 2019 | 2020 | CUMULATIVE (2016 - 2020) |
|---|---|---|---|---|---|---|
| Share of spending in 2014 (42%) | $ 508.4 | $ 508.4 | $ 508.4 | $ 508.4 | $ 508.4 | $ 2,541.0 |
| Share of cost each year (42%) | $ 571.2 | $ 589.0 | $ 607.5 | $ 626.0 | $ 644.4 | $ 3,038.0 |
| **Difference / funding gap** | **$ (62.8)** | **$ (80.6)** | **$ (99.1)** | **$ (117.6)** | **$ (136.0)** | **$ (497.0)** |

## Cost burden shift if public sector funding does not increase

If increases in the absolute amount of public sector (donors and governments combined) spending are not forthcoming and the amount it spent on supplies in 2014 remains constant through 2020, the relative contribution of the public sector to the total supplies consumption cost will drop, and a greater cost burden will fall to OOP spending by individuals (Figure 18; Table 25).

As noted earlier, the public sector contributed **42%** ($508.4 million) of the total amount spent on supplies in 2014 across the 135 LMI countries; we attribute the remaining **58%** (nearly **$695 million**) to OOP spending by individuals.

Under Scenario A, if the public sector continues to contribute **$508.4 million** each year, by 2020 this funding will account for just **33%** of the total supplies consumption cost. The balance – **67%** or **$1.017 million** – will fall to individuals.

Of course, we don't know how many people will have the resources to buy their own contraceptive supplies at unsubsidized prices. Therefore, the cost burden shift is just one potential outcome if the level of public sector spending on contraceptive supplies remains static. Another outcome may be that these women will go without supplies because they cannot afford them. A third possibility is that women will choose a method based on price rather than personal preference, which may lead to inconsistent use or discontinuation.

**FIGURE 18. SHIFTS IN THE DISTRIBUTION OF COST IN 2020**
135 LMI COUNTRIES: SCENARIO A

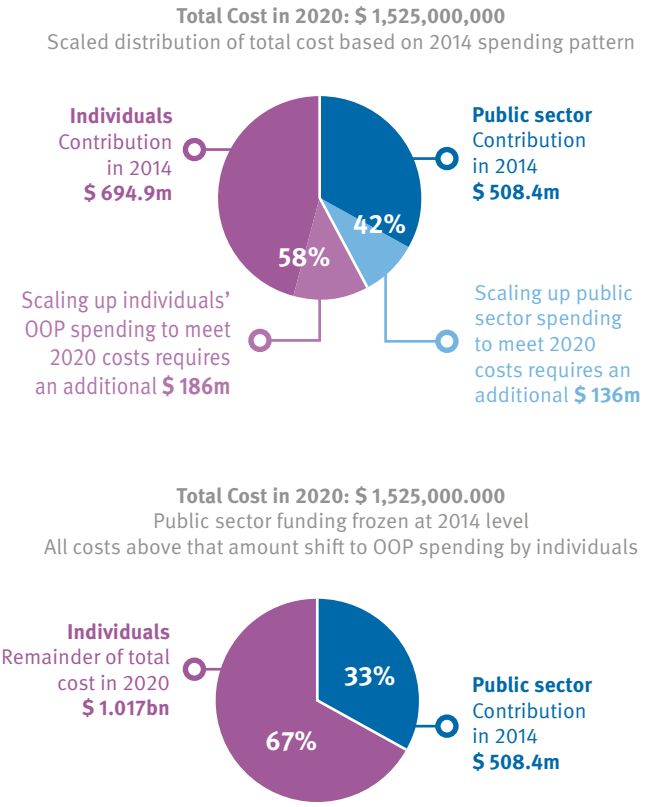



**TABLE 25. COST BURDEN SHIFT IN 2020 IF PUBLIC SECTOR SPENDING STALLS AT 2014 LEVELS**
**135 LMI COUNTRIES: SCENARIO A**

| | Scenario A | |
|---|---|---|
| **Total cost in 2020** | **$ 1,525,000,000** | |
| | **Public Sector** | **Individuals** |
| **Contribution at 2014 level** | **$ 508,400,000** | **$ 694,900,000** |
| Scaled increase to meet 2020 costs | - | $ 186,000,000 |
| Remainder of 2020 costs | - | $ 136,000,000 |
| **Total contribution to cost in 2020** | **$ 508,400,000** | **$ 1,017,000,000** |

# The path to 2020 | Scenario B

Scenario B envisions the achievement of the FP2020 goal: 120 million additional users of contraception in the 69 lowest income countries by 2020.[24] In Scenario B, the demonstration effect of accelerated contraceptive uptake in the 69 focus countries causes a ripple of increased demand across the other 66 LMI countries.

Scenario B attempts to quantify critical dimensions of this success by projecting the volume and cost of the supplies that would be consumed by the users of each method of contraception each year from 2016 to 2020 across all 135 LMI countries. The costs are then compared to historical spending on contraceptive supplies, disaggregated by three types of spender: donors, governments, and individuals who obtain their supplies from the private sector.

Under Scenario B, the number of women in the 135 LMI countries using contraception in 2016 will grow from **452.7 million** to nearly **550 million** in 2020 (Table 26). This is an increase of more than **97 million** women.

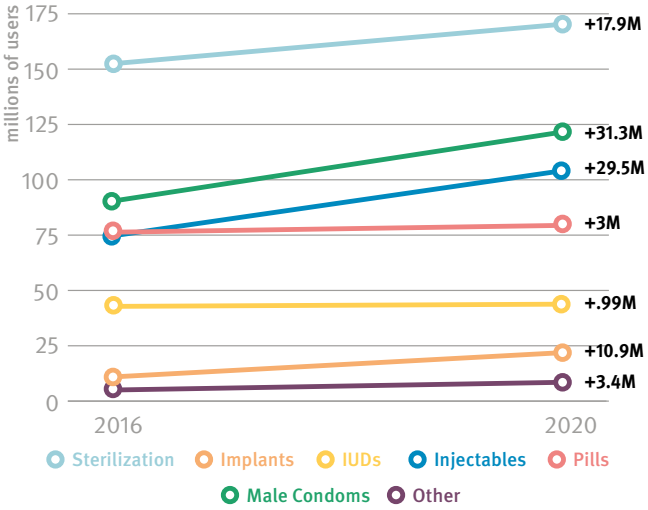
The method with the greatest percentage growth in number of users between 2016 and 2020 is implants. The number of women using implants increases by **100%** over four years, from **10.9 million** in 2016 to **21.9 million** in 2020.

**TABLE 26. NUMBER OF USERS OF EACH CONTRACEPTIVE METHOD, 2016 - 2020**
**135 LMI COUNTRIES: SCENARIO B**

| * Estimates in millions | 2016 | 2017 | 2018 | 2019 | 2020 | CHANGE (2016 - 2020) | |
|---|---|---|---|---|---|---|---|
| **All Methods** | **452.7** | **477.0** | **501.3** | **525.6** | **549.9** | **97.1** | **21%** |
| Sterilization | 152.4 | 159.4 | 163.1 | 166.7 | 170.3 | 17.9 | 12% |
| Implants | 10.9 | 13.2 | 15.9 | 18.8 | 21.9 | 10.9 | 100% |
| IUDs | 42.8 | 42.6 | 43.1 | 43.4 | 43.8 | 0.9 | 2% |
| Injectables | 74.6 | 80.6 | 88.2 | 96.0 | 104.1 | 29.5 | 40% |
| Pills | 76.3 | 77.1 | 78.2 | 78.9 | 79.4 | 3.0 | 4% |
| Male Condoms | 90.3 | 97.9 | 105.9 | 113.8 | 121.6 | 31.3 | 35% |
| Other | 5.0 | 5.9 | 6.7 | 7.6 | 8.5 | 3.4 | 67% |

Under Scenario B, the methods that show the largest increases in the numbers of users between 2016 and 2020 are for male condoms and injectables. Across the 135 LMI countries, the number of women relying on male condoms for contraception will grow by **31.3 million**, to over **121 million** in 2020. The number of women using injectables will increase by **29.5 million**, to more than **104 million** in 2020 (Figure 19).

**FIGURE 19. CHANGE IN NUMBER OF USERS PER METHOD, 2016-2020**
**135 LMI COUNTRIES: SCENARIO B**




While no method shows a decrease in the absolute number of users between 2016 and 2020, several represent slightly diminishing shares of method mix (Table 27). Sterilization drops from **34%** to **31%** of the method mix, contraceptive pills drop from **17%** to **14%**, and IUDs shift slightly from **9%** to **8%**.

**TABLE 27. METHOD MIX, 2016 - 2020**
**135 LMI COUNTRIES: SCENARIO B**

| | 2016 | 2017 | 2018 | 2019 | 2020 |
|---|---|---|---|---|---|
| Sterilization | 34% | 33% | 33% | 32% | 31% |
| Implants | 2% | 3% | 3% | 4% | 4% |
| IUDs | 9% | 9% | 9% | 8% | 8% |
| Injectables | 16% | 17% | 18% | 18% | 19% |
| Pills | 17% | 16% | 16% | 15% | 14% |
| Male Condoms | 20% | 21% | 21% | 22% | 22% |
| Other | 1% | 1% | 1% | 1% | 2% |

# Quantity and cost of supplies consumed by users of contraception

Just as it did under Scenario A, growth in the number of users of contraception under Scenario B serves as the basis for our estimated increases in the amount of supplies required annually by the users of each method, as shown in the table below (Table 28).

The method that shows the greatest percentage increase in the quantity of supplies consumed annually is implants, which increases by **119%**; the quantity of implants consumed in 2020 (**9.4 million**) is more than double the amount consumed in 2016 (**4.3 million**).

**TABLE 28. CONSUMPTION QUANTITIES FOR EACH CONTRACEPTIVE METHOD, 2016 - 2020**
**135 LMI COUNTRIES: SCENARIO B**

| * Estimates in millions | 2016 | 2017 | 2018 | 2019 | 2020 | CUMULATIVE TOTAL | CHANGE (2016 - 2020) | |
|---|---|---|---|---|---|---|---|---|
| Sterilization | 12.8 | 13.3 | 13.6 | 13.9 | 14.2 | 68.0 | 1.4 | 11% |
| Implants | 4.3 | 6.2 | 7.2 | 8.3 | 9.4 | 35.6 | 5.1 | 119% |
| IUDs | 9.7 | 12.2 | 12.1 | 12.0 | 11.9 | 58.1 | 2.2 | 23% |
| Injectables | 309.4 | 335.2 | 367.1 | 400.2 | 434.1 | 1,846.0 | 124.7 | 40% |
| Pills | 1,069.0 | 1,079.0 | 1,094.0 | 1,105.0 | 1,112.0 | 5,462.0 | 43.1 | 4% |
| Male Condoms | 6,957.0 | 7,538.0 | 8,154.0 | 8,763.0 | 9,368.0 | 40,782.0 | 2,410.0 | 35% |
| Other | 58.0 | 70.3 | 82.4 | 95.1 | 108.7 | 414.7 | 50.7 | 87% |

Our estimates of the annual cost of these supplies, which are shown in Table 29, are based on current commodity prices multiplied by the consumption quantity required each year. The cost estimates have not been adjusted for potential future changes in price (see explanation in Section 7).

Under Scenario B, the consumption cost of supplies in 2020 is **$1.744 billion**; this is approximately **$200 million** higher than the cost in 2020 under Scenario A. The consumption cost for 2020 in Scenario B is **$392 million** greater than the consumption cost in in 2016. The single method with the greatest cost difference between 2016 and 2020 is injectables: in Scenario B, the cost of the supplies consumed by users of injectables in 2020 is over **$226 million** greater than the cost in 2016.

**TABLE 29. CONSUMPTION COSTS FOR EACH CONTRACEPTIVE METHOD, 2016 - 2020**
**135 LMI COUNTRIES: SCENARIO B**

| * Estimates in millions | 2016 | 2017 | 2018 | 2019 | 2020 | CUMULATIVE TOTAL | CHANGE (2016 - 2020) | |
|---|---|---|---|---|---|---|---|---|
| **All Methods** | **$ 1,352.0** | **$ 1,450.0** | **$ 1,548.0** | **$ 1,646.0** | **$ 1,744.0** | **$ 7,741.0** | **$ 392.4** | **29%** |
| Sterilization | $ 43.6 | $ 45.4 | $ 46.4 | $ 47.4 | $ 48.3 | $ 231.3 | $ 4.7 | 11% |
| Implants | $ 46.2 | $ 66.3 | $ 76.9 | $ 88.2 | $ 100.0 | $ 377.8 | $ 53.8 | 117% |
| IUDs | $ 26.0 | $ 28.0 | $ 27.0 | $ 25.6 | $ 24.4 | $ 131.2 | $ (1.5) | -6% |
| Injectables | $ 544.8 | $ 592.3 | $ 650.3 | $ 710.1 | $ 771.5 | $ 3,269.0 | $ 226.6 | 42% |
| Pills | $ 513.0 | $ 524.2 | $ 537.1 | $ 548.2 | $ 557.5 | $ 2,680.0 | $ 44.4 | 9% |
| Male Condoms | $ 162.3 | $ 175.2 | $ 188.4 | $ 201.4 | $ 214.4 | $ 942.0 | $ 52.0 | 32% |
| Other | $ 15.9 | $ 18.8 | $ 21.8 | $ 24.8 | $ 28.1 | $ 109.6 | $ 12.1 | 76% |

## Sterilization

In 2016, there were **152.4 million** women living in the 135 LMI countries who relied on sterilization as their contraceptive method. Sterilization represented **34%** of the method mix (Table 30). There were **12.8 million** sterilization kits used in procedures performed in 2016; these kits were valued at **$43.6 million**.

Under Scenario B, the number of women who rely on sterilization in 2020 will be **170.3 million**; this is an increase of **12%** compared to 2016. There will be **14.2 million** sterilization kits consumed in 2020 at a cost of **$48.3 million**, which is an **11%** increase over the 2016 totals. Sterilization, however, would represent a slightly lesser share of method mix in 2020 (**31%**) than it did in 2016.

**TABLE 30. STERILIZATION** — **135 LMI COUNTRIES, SCENARIO B**

| * Estimates in millions | 2016 | 2017 | 2018 | 2019 | 2020 | CUMULATIVE TOTAL | CHANGE 2016 - 2020 | |
|---|---|---|---|---|---|---|---|---|
| Number of users | 152.4 | 159.4 | 163.1 | 166.7 | 170.3 | | 17.9 | 12% |
| Method mix share | 34% | 33% | 33% | 32% | 31% | | | |
| Consumption quantity | 12.8 | 13.3 | 13.6 | 13.9 | 14.2 | 68.0 | 1.4 | 11% |
| Consumption cost | $ 43.6 | $ 45.4 | $ 46.4 | $ 47.4 | $ 48.3 | $ 231.3 | $ 4.7 | 11% |

## Implants

In 2016, there were **10.9 million** women living in the 135 LMI countries who used contraceptive implants; **4.3 million** of them had their implants inserted in 2016, while the remainder received them in previous years (Table 31). Implants represented **2%** of the method mix in 2016. The **4.3 million** implants consumed in 2016 cost **$46.2 million**.

In 2020, the number of women using implants under Scenario B would be nearly **22 million**; this is a **100%** increase over 2016. In 2020, implants would represent **4%** of the method mix. The number of implants consumed in 2020 would be **9.4 million**, which is **119%** greater than the consumption quantity in 2016. The cost of the implants consumed in 2020 would be **$100 million**.

**TABLE 31. IMPLANTS** — **135 LMI COUNTRIES, SCENARIO B**

| * Estimates in millions | 2016 | 2017 | 2018 | 2019 | 2020 | CUMULATIVE TOTAL | CHANGE 2016 - 2020 | |
|---|---|---|---|---|---|---|---|---|
| Number of users | 10.9 | 13.2 | 15.9 | 18.8 | 21.9 | | 10.9 | 100% |
| Method mix share | 2% | 3% | 3% | 4% | 4% | | | |
| Consumption quantity | 4.3 | 6.2 | 7.2 | 8.3 | 9.4 | 35.6 | 5.1 | 119% |
| Consumption cost | $ 46.2 | $ 66.3 | $ 76.9 | $ 88.2 | $ 100.0 | $ 377.8 | $ 53.8 | 117% |

## IUDs

In 2016, there were **42.8 million** users of IUDs living in the 135 LMI countries (Table 32). IUDs represented **9%** of the method mix. Insertions performed in 2016 required **9.7 million** IUDs, at a cost of **$26 million**.

Under Scenario B, the number of users of IUDs in 2020 is nearly one million greater: **43.8 million.** Nonetheless, IUDs represent a slightly smaller share (**8%**) of method mix due to changes in the rate of consumption relative to other methods.

In 2020, nearly **12 million** IUDs will be inserted at a cost of **$24.4 million**. The consumption quantity of IUDs is **23%** higher in 2020 than it was in 2016, but the consumption cost is **6%** lower, due to geographical shifts in consumption and differences among countries in average IUD unit prices.

**TABLE 32. IUDS** — **135 LMI COUNTRIES, SCENARIO B**

| * Estimates in millions | 2016 | 2017 | 2018 | 2019 | 2020 | CUMULATIVE TOTAL | CHANGE 2016 - 2020 | |
|---|---|---|---|---|---|---|---|---|
| Number of users | 42.8 | 42.6 | 43.1 | 43.4 | 43.8 | | 0.9 | 2% |
| Method mix share | 9% | 9% | 9% | 8% | 8% | | | |
| Consumption quantity | 9.7 | 12.2 | 12.1 | 12.0 | 11.9 | 58.1 | 2.2 | 23% |
| Consumption cost | $ 26.0 | $ 28.0 | $ 27.0 | $ 25.6 | $ 24.4 | $ 131.2 | $ (1.5) | -6% |

## Injectables

In 2016, there were **74.6 million** women living in the 135 LMI countries who relied on injectables as their method of contraception (Table 33). Injectables represented **16%** of the method mix. Women consumed **309.4 million** injectables at a cost of **$544.8 million**; this was **40%** of the total cost of the supplies consumed by the users of all methods in 2016.

Under Scenario B, in the year 2020 the number of users of injectables increases to slightly more than **104 million**. Injectables represent **19%** of the method mix in 2020. Slightly more than **434 million** units of injectables consumed by women in 2020, this is **40%** more than were consumed in 2016. The consumption cost of injectables in 2020 is more than **$771 million**; this is **$226.6 million** greater than the cost in 2016.

**TABLE 33. INJECTABLES** — **135 LMI COUNTRIES, SCENARIO B**

| * Estimates in millions | 2016 | 2017 | 2018 | 2019 | 2020 | CUMULATIVE TOTAL | CHANGE 2016 - 2020 | |
|---|---|---|---|---|---|---|---|---|
| Number of users | 74.6 | 80.6 | 88.2 | 96.0 | 104.1 | | 29.5 | 40% |
| Method mix share | 16% | 17% | 18% | 18% | 19% | | | |
| Consumption quantity | 309.4 | 335.2 | 367.1 | 400.2 | 434.1 | 1,846.0 | 124.7 | 40% |
| Consumption cost | $ 544.8 | $ 592.3 | $ 650.3 | $ 710.1 | $ 771.5 | $ 3,269.0 | $226.6 | 42% |

## Pills

In 2016, there were **76.3 million** users of contraceptive pills living in the 135 LMI countries (Table 34). Pills represented **17%** of the method mix. Women consumed **1.069 billion** pill cycles in 2016 at a cost of **$513 million**.

Under Scenario B, the number of pill users in the year 2020 is nearly **80 million**—**4%** higher than in 2016. Despite this increase, pills represent a smaller share of method mix in 2020 (**14%**) than in 2016 (**17%**). The quantity of pill cycles consumed in 2020 is **1.112 billion**, and the consumption cost is **$557.5 million** (an increase of **$44.4 million**).

| TABLE 34. PILLS | | | | | | 135 LMI COUNTRIES, SCENARIO B | | |
|---|---|---|---|---|---|---|---|---|
| * Estimates in millions | 2016 | 2017 | 2018 | 2019 | 2020 | CUMULATIVE TOTAL | CHANGE 2016 - 2020 | |
| Number of users | 76.3 | 77.1 | 78.2 | 78.9 | 79.4 | | 3.0 | 4% |
| Method mix share | 17% | 16% | 16% | 15% | 14% | | | |
| Consumption quantity | 1,069.0 | 1,079.0 | 1,094.0 | 1,105.0 | 1,112.0 | 5,462.0 | 43.1 | 4% |
| Consumption cost | $ 513.0 | $ 524.2 | $ 537.1 | $ 548.2 | $ 557.5 | $ 2,680.0 | $ 44.4 | 9% |

## Male condoms

In 2016, **90.3 million** women living in 135 LMI countries relied on their partners' use of male condoms as their method of contraception (Table 35). Male condoms used for contraception represented **20%** of the method mix. Nearly **7 billion** male condoms were used for contraceptive purposes in 2016, at a cost of **$162.3 million**.

Under Scenario B, the number of women relying on male condoms in 2020 grows to **121.6 million;** this is **35%** more than in 2016. Male condoms represent **22%** of the method mix in 2020. The number of condoms used for contraception in 2020 is **9.368 billion**, which is an increase of **2.41 billion** over the quantity in 2016. The consumption cost in 2020 is **32%** higher at more than **$214.4 million**.

| TABLE 35. MALE CONDOMS | | | | | | 135 LMI COUNTRIES, SCENARIO B | | |
|---|---|---|---|---|---|---|---|---|
| * Estimates in millions | 2016 | 2017 | 2018 | 2019 | 2020 | CUMULATIVE TOTAL | CHANGE 2016 - 2020 | |
| Number of users | 90.3 | 97.9 | 105.9 | 113.8 | 121.6 | | 31.3 | 35% |
| Method mix share | 20% | 21% | 21% | 22% | 22% | | | |
| Consumption quantity | 6,957.0 | 7,538.0 | 8,154.0 | 8,763.0 | 9,368.0 | 40,782.0 | 2,410.0 | 35% |
| Consumption cost | $ 162.3 | $ 175.2 | $ 188.4 | $ 201.4 | $ 214.4 | $ 942.0 | $ 52.0 | 32% |

# The funding gap

Our analysis of potential funding gaps in Scenario B begins at the same place as our analysis of Scenario A, with the total amount spent on contraceptive supplies in 2014.

As noted earlier, 2014 spending amounted to **$1.203 billion** (Table 36). We attributed this to three types of spender: donors (**25%**); governments of the 135 LMI countries using non-donor revenue (**17%**); and individuals who obtained their supplies from the private sector (**58%**). Donor and government spending added together represents all public sector expenditures in 2014 (**42%**).

**TABLE 36. TOTAL SPENDING ON CONTRACEPTIVE SUPPLIES IN 2014**
**135 LOW- AND MIDDLE-INCOME COUNTRIES**

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Total spending on supplies | $ | 1,203,000,000 | | | | | |
| Combined Public Sector | $ | 508,400,000 | 42% | Donors only | $ | 305,500,000 | 25% |
| | | | | Governments only | $ | 202,900,000 | 17% |
| Individuals/Private Sector | $ | 694,900,000 | 58% | | | | |

## All sources / public + private sectors

As previously noted, there was already a supplies funding deficit in 2016: the cost of supplies consumed in that year (**$1.352 billion**) was nearly **$150 million** greater than the total amount spent on supplies in 2014 (**$1.203 billion**) (Table 37).

Under Scenario B, the supplies consumption cost in 2020 is roughly a quarter-billion dollars higher than it is in Scenario A. Compared to the amount spent in 2014, the 2020 consumption cost of **$1.744 billion** indicates an additional **$541 million** in spending would be required just to meet contraceptive users' supply needs.

**TABLE 37. TOTAL SPENDING, COST, AND FUNDING GAP ALL SOURCES (PUBLIC + PRIVATE SECTORS)** — **135 LMI COUNTRIES, SCENARIO B**

| * Estimates in millions | 2016 | 2017 | 2018 | 2019 | 2020 | CUMULATIVE (2016 - 2020) |
|---|---|---|---|---|---|---|
| Spending in 2014 (100%) | $ 1,203 | $ 1,203 | $ 1,203 | $ 1,203 | $ 1,203 | $ 6,016 |
| Cost each year (100%) | $ 1,352 | $ 1,450 | $ 1,548 | $ 1,646 | $ 1,744 | $ 7,741 |
| **Difference / funding gap** | $ (149) | $ (247) | $ (345) | $ (443) | $ (541) | $ (1,725) |

## Donors

In 2014 donors contributed **25%**, or **$305.5 million**, of total spending on contraceptive supplies across the 135 LMI countries (Table 38).

In 2016, **25%** of the consumption cost was **$343.2 million**. For donors to maintain their **25%** share of total spending, they would have had to contribute at minimum an additional **$37.7 million** compared to 2014.

In 2020, under Scenario B, donors would need to contribute **$442.8 million** to maintain their **25%** share of the total cost. This is **$137.3 million** more than they spent in 2014.

**TABLE 38. SHARE OF SPENDING, COST, AND FUNDING GAP DONORS (PUBLIC SECTOR)** — **135 LMI COUNTRIES, SCENARIO B**

| * Estimates in millions | 2016 | 2017 | 2018 | 2019 | 2020 | CUMULATIVE (2016 - 2020) |
|---|---|---|---|---|---|---|
| Share of spending in 2014 (25%) | $ 305.5 | $ 305.5 | $ 305.5 | $ 305.5 | $ 305.5 | $ 1,527.0 |
| Cost share each year (25%) | $ 343.2 | $ 368.2 | $ 393.0 | $ 417.9 | $ 442.8 | $ 1,965.0 |
| **Difference / funding gap** | $ (37.7) | $ (62.7) | $ (87.5) | $ (112.4) | $ (137.3) | $ (438.0) |

## Governments

In 2014, government spending of internally generated revenue accounted for **17%**, or **$202.9 million**, of total spending on contraceptive supplies across the 135 LMI countries (Table 39). In 2016, **17%** of the consumption cost was **$227.9 million**. For governments to maintain their **17%** share of spending, they would have had to contribute at least another **$25 million** compared to 2014.

In 2020, **17%** of the total consumption cost would be **$294.1 million**. This is **$91.2 million** more than the government contribution in 2014.

**TABLE 39. SHARE OF SPENDING, COST, AND FUNDING GAP GOVERNMENTS (PUBLIC SECTOR)** — **135 LMI COUNTRIES, SCENARIO B**

| * Estimates in millions | 2016 | 2017 | 2018 | 2019 | 2020 | CUMULATIVE (2016 - 2020) |
|---|---|---|---|---|---|---|
| Share of spending in 2014 (17%) | $ 202.9 | $ 202.9 | $ 202.9 | $ 202.9 | $ 202.9 | $ 1,014.0 |
| Share of cost each year (17%) | $ 227.9 | $ 244.5 | $ 261.0 | $ 277.5 | $ 294.1 | $ 1,305.0 |
| **Difference / funding gap** | $ (25.0) | $ (41.6) | $ (58.1) | $ (74.6) | $ (91.2) | $ (291.0) |

## Individuals / private sector

As of 2014, spending by individuals who obtain their supplies from the private sector accounts for **58%**, or nearly **$695 million**, of total spending on contraceptive supplies across the 135 LMI countries (Table 40). In 2016, **58%** of the consumption cost was **$780.8 million**. If spending by individuals were to remain at **58%**, it would have required an additional **$85.9 million**.

Under Scenario B, **58%** of the consumption cost of supplies in 2020 is **$1.007 billion.** This is **$312.1 million** more than individuals spent on supplies in 2014.

**TABLE 40. SHARE OF SPENDING, COST, AND FUNDING GAP INDIVIDUALS (PRIVATE SECTOR) — 135 LMI COUNTRIES, SCENARIO B**

| * Estimates in millions | 2016 | 2017 | 2018 | 2019 | 2020 | CUMULATIVE (2016 - 2020) |
|---|---|---|---|---|---|---|
| Share of spending in 2014 (58%) | $ 694.9 | $ 694.9 | $ 694.9 | $ 694.9 | $ 694.9 | $ 3,474.0 |
| Share of cost each year (58%) | $ 780.8 | $ 837.7 | $ 894.0 | $ 950.6 | $ 1,007.0 | $ 4,470.0 |
| **Difference / funding gap** | $ (85.9) | $ (142.8) | $ (199.1) | $ (255.7) | $ (312.1) | $ (996.0) |

## Public sector / donors + governments

In 2014, the public sector (donors and country government resources combined) contributed **42%**, or **$508.4 million**, of total spending on contraceptive supplies across the 135 LMI countries (Table 41). In 2016, **42%** of the total cost of consumption was **$571.2 million**. For the public sector to continue contributing a **42%** share of total spending, it would have needed to spend at least **$62.8 million** more than it spent in 2014.

Under Scenario B, in 2020, maintaining the public sector's **42%** contribution to total spending on contraceptive supplies requires at least **$737 million**. This is **$228.6 million** more than the public sector spent on supplies in 2014.

**TABLE 41. SHARE OF SPENDING, COST, AND FUNDING GAP PUBLIC SECTOR (DONORS + GOVERNMENTS) — 135 LMI COUNTRIES, SCENARIO B**

| * Estimates in millions | 2016 | 2017 | 2018 | 2019 | 2020 | CUMULATIVE (2016 - 2020) |
|---|---|---|---|---|---|---|
| Share of spending in 2014 (42%) | $ 508.4 | $ 508.4 | $ 508.4 | $ 508.4 | $ 508.4 | $ 2,541.0 |
| Share of cost each year (42%) | $ 571.2 | $ 612.8 | $ 654.0 | $ 695.4 | $ 737.0 | $ 3,270.0 |
| **Difference / funding gap** | $ (62.8) | $ (104.4) | $ (145.6) | $ (187.0) | $ (228.6) | $ (729.0) |

## Cost burden shift if public sector funding does not increase

If increases in public sector (donors and governments combined) spending are not forthcoming and the level of funding for supplies remains constant between 2014 and 2020, the relative contribution of the public sector to total costs would drop and a greater cost burden would fall to out-of-pocket spending by individuals.

In the 135 LMI countries, the public sector contributed **42%** (**$508.4 million**) to total supplies spending in 2014. In 2020, under Scenario A, this amount would represent just **29%** of the total supplies consumption cost. The balance – **$1.235 billion** under Scenario B – would shift to individual out-of-pocket spending (Figure 20; Table 42).

**FIGURE 20. SHIFTS IN THE DISTRIBUTION OF COST IN 2020**
135 LMI COUNTRIES: SCENARIO B

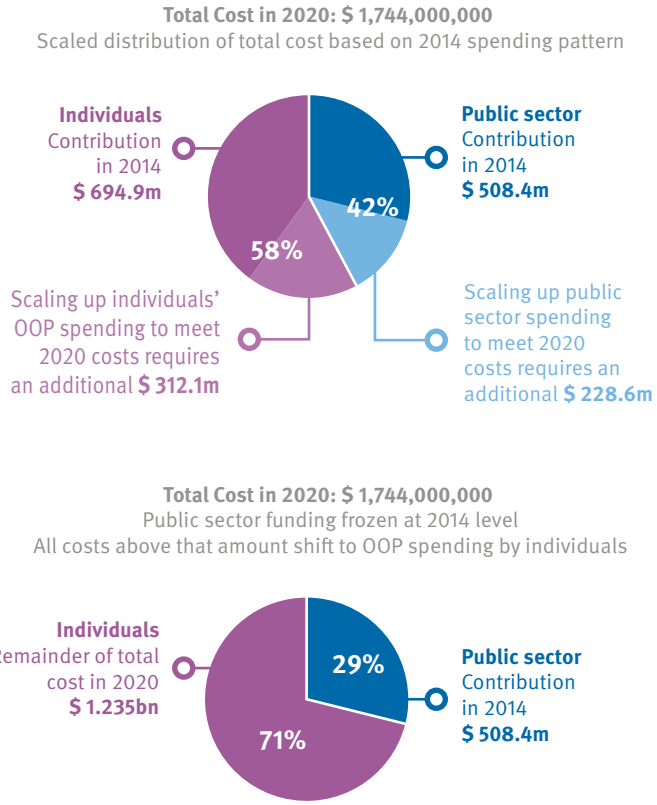



**TABLE 42. COST BURDEN SHIFT IN 2020 IF PUBLIC SECTOR SPENDING STALLS AT 2014 LEVELS**
**135 LMI COUNTRIES: SCENARIO B**

| | Scenario B | |
|---|---|---|
| **Total cost in 2020** | **$ 1,744,000,000** | |
| | **Public Sector** | **Individuals** |
| **Contribution at 2014 level** | **$ 508,400,000** | **$ 694,900,000** |
| Scaled increase to meet 2020 costs | - | $ 312,100,000 |
| Remainder of 2020 costs | - | $ 228,600,000 |
| **Total contribution to cost in 2020** | **$ 508,400,000** | **$ 1,235,000,000** |

# SECTION 5

## Findings for the 69 FP2020 focus countries

69 FP2020 FOCUS COUNTRIES | SCENARIO A | SCENARIO B

# The path to 2020 | Scenario A

Under Scenario A, each FP2020 focus country's current trajectory of change in the number of users of each contraceptive method is extended to the year 2020. This approach assumes there will be no appreciable deviation from current growth trends.

In 2016, there were more than **300 million** users of contraception living in these 69 countries (Table 43). Under Scenario A, this number will grow to **334 million** in the year 2020. This is an increase of **11%** over 4 years, which is greater than the increase for the full set of 135 LMI countries (**8%**) over the same time period. This is likely due to a number of factors, possibly including lower rates of contraceptive prevalence at the outset and a concentration of effort on expanding family planning programs following the London Summit on Family Planning in 2012.

**TABLE 43. NUMBER OF USERS OF EACH CONTRACEPTIVE METHOD, 2016 - 2020**
**69 FP2020 FOCUS COUNTRIES: SCENARIO A**

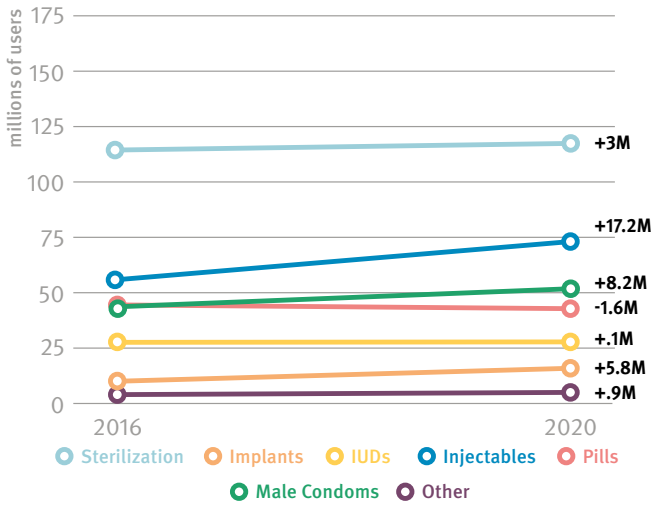
| * Estimates in millions | 2016 | 2017 | 2018 | 2019 | 2020 | CHANGE (2016 - 2020) | |
|---|---|---|---|---|---|---|---|
| **All Methods** | **300.3** | **308.4** | **317.2** | **325.5** | **334.0** | **33.7** | **11%** |
| Sterilization | 114.4 | 115.1 | 116.2 | 116.8 | 117.4 | 3.0 | 3% |
| Implants | 10.0 | 11.4 | 12.8 | 14.3 | 15.9 | 5.8 | 58% |
| IUDs | 27.6 | 27.7 | 27.8 | 27.8 | 27.8 | 0.1 | 0% |
| Injectables | 55.8 | 60.0 | 64.3 | 68.7 | 73.1 | 17.2 | 31% |
| Pills | 44.5 | 44.2 | 43.8 | 43.3 | 42.8 | (1.6) | -4% |
| Male Condoms | 43.6 | 45.5 | 47.6 | 49.6 | 51.8 | 8.2 | 19% |
| Other | 4.0 | 4.2 | 4.5 | 4.7 | 5.0 | 0.9 | 23% |

As shown in the charts below, a large percentage growth rate in the number of users does not necessarily correlate with a large increase in the absolute number of users or a big shift in method mix.

Under Scenario A, the number of users of implants grows by **58%**, from **10 million** in 2016 to **15.9 million** in 2020 (Figure 21). Despite this growth, implants represent a small percentage of the total method mix: **3%** in 2016 and **5%** in 2020 (Table 44).

By contrast, injectables show a lower growth rate (**31%**), but add the largest absolute number of users. Under Scenario A, **17.2 million** users of injectables are added by the year 2020. This is reflected in a slight uptick in injectables' share of the method mix: it rises from **19%** in 2016 to **22%** in 2020.

**FIGURE 21. CHANGE IN NUMBER OF USERS PER METHOD, 2016-2020**
**69 FP2020 FOCUS COUNTRIES: SCENARIO A**




Under Scenario A, the only method to show a net loss in the number of users is contraceptive pills: there would be **1.6 million** fewer women using pills in 2020 than there were in 2016. The impact on the total method mix is minimal, however; pills represent **15%** of the method in 2016 and **13%** in 2020.

A similarly slight decline in share of method mix is observed for sterilization (from **38%** in 2016 to **35%** in 2020) and IUDs (from **9%** to **8%**) though neither method shows a decrease in the absolute number of users.

**TABLE 44. METHOD MIX, 2016 - 2020**
**69 FP2020 FOCUS COUNTRIES: SCENARIO A**

| | 2016 | 2017 | 2018 | 2019 | 2020 |
|---|---|---|---|---|---|
| Sterilization | 38% | 37% | 37% | 36% | 35% |
| Implants | 3% | 4% | 4% | 4% | 5% |
| IUDs | 9% | 9% | 9% | 9% | 8% |
| Injectables | 19% | 19% | 20% | 21% | 22% |
| Pills | 15% | 14% | 14% | 13% | 13% |
| Male Condoms | 15% | 15% | 15% | 15% | 16% |
| Other | 1% | 1% | 1% | 1% | 2% |

# Quantity and cost of supplies consumed by users of contraception

As the number of users of each contraceptive method changes from 2016 to 2020 in Scenario A, so too does the volume of supplies we anticipate these users would consume (Table 45).

Our analysis does not project future changes in the price of contraceptive commodities and associated clinical supplies (see explanation in Section 7). Therefore, the changes in the cost of supplies shown under Scenarios A and B relate directly to the changes in the quantity of supplies required by the users of each method.

**TABLE 45. CONSUMPTION QUANTITIES FOR EACH CONTRACEPTIVE METHOD, 2016 - 2020**
**69 FP2020 FOCUS COUNTRIES: SCENARIO A**

| * Estimates in millions | 2016 | 2017 | 2018 | 2019 | 2020 | CUMULATIVE TOTAL | CHANGE (2016 - 2020) | |
|---|---|---|---|---|---|---|---|---|
| Sterilization | 9.0 | 9.0 | 9.1 | 9.2 | 9.2 | 45.7 | 0.2 | 3% |
| Implants | 3.9 | 4.4 | 4.9 | 5.4 | 5.9 | 24.7 | 2.0 | 51% |
| IUDs | 6.2 | 6.2 | 6.3 | 6.3 | 6.3 | 31.5 | 0.0 | 1% |
| Injectables | 228.7 | 245.6 | 263.2 | 281.1 | 299.1 | 1,317.0 | 70.4 | 31% |
| Pills | 623.4 | 618.9 | 613.7 | 607.0 | 599.7 | 3,062.0 | (23.7) | -4% |
| Male Condoms | 3,361.0 | 3,506.0 | 3,667.0 | 3,826.0 | 3,993.0 | 18,356.0 | 631.7 | 19% |
| Other | 45.0 | 48.9 | 53.1 | 57.5 | 62.3 | 266.9 | 17.2 | 38% |

The cost of the supplies consumed by all users of contraception living in the 69 FP2020 focus countries in 2016 was nearly **$896 million** (Table 46). Under Scenario A, the cost will increase by **18%** – more than **$159 million** – to a of total **$1.055 billion** in 2020.

The method with the greatest percentage growth in consumption cost from 2016 to 2020, based on the number of new users plus women requiring reinsertions, is implants at **51%**. Injectables, however, will require the largest amount of additional spending: the consumption cost for injectables will be **$121.3 million** greater in 2020 than it was in 2016. IUDs and pills are the only methods that decline in consumption cost, at **-3%** and **-1%**, respectively.

**TABLE 46. CONSUMPTION COSTS FOR EACH CONTRACEPTIVE METHOD, 2016 - 2020**
**69 FP2020 FOCUS COUNTRIES: SCENARIO A**

| * Estimates in millions | 2016 | 2017 | 2018 | 2019 | 2020 | CUMULATIVE TOTAL | CHANGE (2016 - 2020) | |
|---|---|---|---|---|---|---|---|---|
| **All Methods** | **$ 896.0** | **$ 934.2** | **$ 974.4** | **$ 1,014.0** | **$ 1,055.0** | **$ 4,874.0** | **$ 159.1** | **18%** |
| Sterilization | $ 30.6 | $ 30.8 | $ 31.1 | $ 31.3 | $ 31.4 | $ 155.5 | $ 0.8 | 3% |
| Implants | $ 41.6 | $ 46.4 | $ 51.7 | $ 57.1 | $ 62.9 | $ 259.9 | $ 21.2 | 51% |
| IUDs | $ 11.6 | $ 11.5 | $ 11.4 | $ 11.3 | $ 11.2 | $ 57.3 | $ (0.3) | -3% |
| Injectables | $ 398.2 | $ 427.4 | $ 457.6 | $ 488.4 | $ 519.6 | $ 2,291.0 | $ 121.3 | 30% |
| Pills | $ 324.6 | $ 324.6 | $ 324.3 | $ 323.4 | $ 322.1 | $ 1,619.0 | $ (2.5) | -1% |
| Male Condoms | $ 76.1 | $ 79.4 | $ 83.0 | $ 86.6 | $ 90.3 | $ 415.7 | $ 14.1 | 19% |
| Other | $ 12.8 | $ 13.8 | $ 14.9 | $ 16.0 | $ 17.2 | $ 75.0 | $ 4.4 | 34% |

## Sterilization

Under Scenario A, the number of women who rely on sterilization will increase from **114.4 million** in 2016 to **117.4 million** in 2020 (Table 47).

Its share of method mix will decline slightly, but more sterilization kits will be used in 2020 than in 2016, resulting in a **3%** increase in the supplies consumption quantity. The consumption cost for sterilization kits will also rise by **3%**, from **$30.6 million** in 2016 to **$31.4 million** in 2020.

**TABLE 47. STERILIZATION** — **69 FP2020 FOCUS COUNTRIES: SCENARIO A**

| * Estimates in millions | 2016 | 2017 | 2018 | 2019 | 2020 | CUMULATIVE TOTAL | CHANGE 2016 - 2020 | |
|---|---|---|---|---|---|---|---|---|
| Number of users | 114.4 | 115.1 | 116.2 | 116.8 | 117.4 | | 3.0 | 3% |
| Method mix share | 38% | 37% | 37% | 36% | 35% | | | |
| Consumption quantity | 9.0 | 9.0 | 9.1 | 9.2 | 9.2 | 45.7 | 0.2 | 3% |
| Consumption cost | $ 30.6 | $ 30.8 | $ 31.1 | $ 31.3 | $ 31.4 | $ 155.5 | $ 0.8 | 3% |

## Implants

Under Scenario A, the number of users of implants will increase by **58%,** from **10 million** in 2016 to **15.9 million** in 2020 (Table 48).

The number of implants inserted will also increases, from **3.9 million** in 2016 to **5.9 million** in 2020. Accordingly, the consumption cost of implants will grow from **$41.6 million** in 2016 to **$62.9 million** in 2020.

**TABLE 48. IMPLANTS** — **69 FP2020 FOCUS COUNTRIES: SCENARIO A**

| * Estimates in millions | 2016 | 2017 | 2018 | 2019 | 2020 | CUMULATIVE TOTAL | CHANGE 2016 - 2020 | |
|---|---|---|---|---|---|---|---|---|
| Number of users | 10.0 | 11.4 | 12.8 | 14.3 | 15.9 | | 5.8 | 58% |
| Method mix share | 3% | 4% | 4% | 4% | 5% | | | |
| Consumption quantity | 3.9 | 4.4 | 4.9 | 5.4 | 5.9 | 24.7 | 2.0 | 51% |
| Consumption cost | $ 41.6 | $ 46.4 | $ 51.7 | $ 57.1 | $ 62.9 | $ 259.9 | $ 21.2 | 51% |

## IUDs

Under Scenario A, there will be little change in the number of users of IUDs from 2016 to 2020. While the absolute number of users will grow by **130 thousand**, the share of method mix will dip slightly, from **9%** to **8%** (Table 49).

In 2020, an estimated **6.3 million** IUDs will be inserted at a supplies consumption cost of **$11.2 million**. This amount is slightly lower (**-3%**) than the cost in 2016 due to geographical shifts in consumption and differences among countries in average IUD unit prices.

**TABLE 49. IUDS** — **69 FP2020 FOCUS COUNTRIES: SCENARIO A**

| * Estimates in millions | 2016 | 2017 | 2018 | 2019 | 2020 | CUMULATIVE TOTAL | CHANGE 2016 - 2020 | |
|---|---|---|---|---|---|---|---|---|
| Number of users | 27.6 | 27.7 | 27.8 | 27.8 | 27.8 | | 0.1 | 0% |
| Method mix share | 9% | 9% | 9% | 9% | 8% | | | |
| Consumption quantity | 6.2 | 6.2 | 6.3 | 6.3 | 6.3 | 31.5 | 0.0 | 1% |
| Consumption cost | $ 11.6 | $ 11.5 | $ 11.4 | $ 11.3 | $ 11.2 | $ 57.3 | $ (0.3) | -3% |

## Injectables

Under Scenario A, the number of women using injectables will grow by **31%**, from **55.8 million** in 2016 to **73.1 million** in 2020 (Table 50). However, its share of the method mix will increase only slightly, from **19%** to **22%**.

The consumption quantity of injectables will jump **31%**, from **228.7 million** to nearly **300 million** in 2020. This will result in a consumption cost that is **$121.3** greater in 2020 than in was in 2016.

**TABLE 50. INJECTABLES** — **69 FP2020 FOCUS COUNTRIES: SCENARIO A**

| * Estimates in millions | 2016 | 2017 | 2018 | 2019 | 2020 | CUMULATIVE TOTAL | CHANGE 2016 - 2020 | |
|---|---|---|---|---|---|---|---|---|
| Number of users | 55.8 | 60.0 | 64.3 | 68.7 | 73.1 | | 17.2 | 31% |
| Method mix share | 19% | 19% | 20% | 21% | 22% | | | |
| Consumption quantity | 228.7 | 245.6 | 263.2 | 281.1 | 299.1 | 1,317.0 | 70.4 | 31% |
| Consumption cost | $ 398.2 | $ 427.4 | $ 457.6 | $ 488.4 | $ 519.6 | $ 2,291.0 | $121.3 | 30% |

## Pills

Under Scenario A, the number of women using contraceptive pills decreases from **44.5 million** in 2016 to **42.8 million** in 2020 (Table 51).

The share of method mix decreases as well, from **15%** to **13%**. The consumption cost of pills decreases from **$324.6 million** in 2016 to **$322.1 million** in 2020.

| TABLE 51. PILLS | | | | | | 69 FP2020 FOCUS COUNTRIES: SCENARIO A | |
|---|---|---|---|---|---|---|---|
| * Estimates in millions | 2016 | 2017 | 2018 | 2019 | 2020 | CUMULATIVE TOTAL | CHANGE 2016 - 2020 |
| Number of users | 44.5 | 44.2 | 43.8 | 43.3 | 42.8 | | (1.6) -4% |
| Method mix share | 15% | 14% | 14% | 13% | 13% | | |
| Consumption quantity | 623.4 | 618.9 | 613.7 | 607.0 | 599.7 | 3,062.0 | (23.7) -4% |
| Consumption cost | $ 324.6 | $ 324.6 | $ 324.3 | $ 323.4 | $ 322.1 | $ 1,619.0 | $ (2.5) -1% |

## Male Condoms

Under Scenario A, the number of women who rely on male condoms as their method of contraception grows from **43.6 million** in 2016 to **51.8 million** in 2020 (Table 52).

The increase in cost, however, is relatively modest: it is **$14.1 million** higher in 2020 than it is in 2016.

| TABLE 52. MALE CONDOMS | | | | | | 69 FP2020 FOCUS COUNTRIES: SCENARIO A | |
|---|---|---|---|---|---|---|---|
| * Estimates in millions | 2016 | 2017 | 2018 | 2019 | 2020 | CUMULATIVE TOTAL | CHANGE 2016 - 2020 |
| Number of users | 43.6 | 45.5 | 47.6 | 49.6 | 51.8 | | 8.2 19% |
| Method mix share | 15% | 15% | 15% | 15% | 16% | | |
| Consumption quantity | 3,361.0 | 3,506.0 | 3,667.0 | 3,826.0 | 3,993.0 | 18,356.0 | 631.7 19% |
| Consumption cost | $ 76.1 | $ 79.4 | $ 83.0 | $ 86.6 | $ 90.3 | $ 415.7 | $ 14.1 19% |

# The funding gap

Our funding gap estimates are derived from the comparison of annual supply consumption costs to a baseline of spending on supplies in 2014 – the most recent year with sufficient data for this analysis (Table 53). The gaps represent the amount of additional funding required each year to meet the projected consumption cost.

Our analysis then shows the breakdown of the gap among donors, governments, and individuals. As stated previously in this report, the projected funding gaps for the subset of 69 countries likely underestimate the true cost of providing contraceptive supplies, as prices have not been adjusted for anticipated inflation and quantities do not include amounts that may be needed to maintain optimal inventory levels.

**TABLE 53. TOTAL SPENDING ON CONTRACEPTIVE SUPPLIES IN 2014**

**69 FP2020 FOCUS COUNTRIES**

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Total spending on supplies | $ | 821.800.000 | | | | | |
| Combined Public Sector | $ | 374.700.000 | 46% | Donors only | $ | 248.400.000 | 30% |
| | | | | Governments only | $ | 126.300.000 | 15% |
| Individuals/Private Sector | $ | 447.100.000 | 54% | | | | |

## All sources / public + private sectors

Among the 69 FP2020 focus countries, **$821.8 million** was spent on contraceptive supplies in 2014. This represented **68%** of total spending on supplies across the 135 LMI countries. In 2016, the supplies consumption cost across the 69 countries was nearly **$896 million**; unless spending increased between 2014 and 2016, a gap of **$74.2 million** would already have occurred (Table 54).

Under Scenario A, the consumption cost of supplies in the year 2020 will be **$1.055 billion**. Therefore, if the 69 countries continue in their current growth trajectories and patterns of change, the volume of supplies required by users in 2020 will cost **$233 million** more than was spent on supplies in 2014.

**TABLE 54. TOTAL SPENDING, COST, AND FUNDING GAP ALL SOURCES (PUBLIC + PRIVATE SECTORS)** — **69 FP2020 FOCUS COUNTRIES: SCENARIO A**

| * Estimates in millions | 2016 | 2017 | 2018 | 2019 | 2020 | CUMULATIVE (2016 - 2020) |
|---|---|---|---|---|---|---|
| Total spending in 2014 | $ 821.8 | $ 821.8 | $ 821.8 | $ 821.8 | $ 821.8 | $ 4,108.0 |
| Total cost each year | $ 895.9 | $ 934.2 | $ 974.4 | $ 1,014.0 | $ 1,055.0 | $ 4,874.0 |
| **Difference / funding gap** | $ (74.1) | $ (112.4) | $ (152.6) | $ (192.2) | $ (233.2) | $ (766.0) |

## Donors

In 2014, donors contributed **$248.4 million** or **30%** of the total amount spent on contraceptive supplies across the 69 FP2020 focus countries. To maintain that percentage in 2016 would have required an additional **$22.4 million**, for a total of **$270.8 million** (Table 55).

Under Scenario A, **30%** of the supplies consumption cost in 2020 will be **$318.9 million**; this is **$70.5 million** more than donors spent in 2014. If the absolute amount of donor contributions remains constant at 2014 levels, their 2020 contribution would cover only **24%** of the consumption cost estimated in Scenario A.

**TABLE 55. SHARE OF SPENDING, COST, AND FUNDING GAP DONORS (PUBLIC SECTOR)** — **69 FP2020 FOCUS COUNTRIES: SCENARIO A**

| * Estimates in millions | 2016 | 2017 | 2018 | 2019 | 2020 | CUMULATIVE (2016 - 2020) |
|---|---|---|---|---|---|---|
| Share of spending in 2014 (30%) | $ 248.4 | $ 248.4 | $ 248.4 | $ 248.4 | $ 248.4 | $ 1,241.0 |
| Share of cost each year (30%) | $ 270.8 | $ 282.3 | $ 294.5 | $ 306.6 | $ 318.9 | $ 1,473.0 |
| **Difference / funding gap** | **$ (22.4)** | **$ (33.9)** | **$ (46.1)** | **$ (58.2)** | **$ (70.5)** | **$ (232.0)** |

## Governments

In 2014, the governments of the 69 FP2020 focus countries spent more than **$126 million** in non-donor funds on contraceptive supplies; this represented **15%** of total spending on supplies across the 69 countries. Maintaining that **15%** share to the total consumption cost in in 2016 would have required governments to spend **$137.6 million** – **$11.3 million** more than they did in 2014 (Table 56).

In 2020, governments would need to spend **$162.2 million** to maintain a **15%** share of the consumption costs in Scenario A. This is **$35.8 million** more than they spent in 2014. If the absolute value of government contributions remain constant at 2014 levels, their 2020 contribution would cover only **12%** of the consumption cost.

**TABLE 56. SHARE OF SPENDING, COST, AND FUNDING GAP GOVERNMENTS (PUBLIC SECTOR)** — **69 FP2020 FOCUS COUNTRIES: SCENARIO A**

| * Estimates in millions | 2016 | 2017 | 2018 | 2019 | 2020 | CUMULATIVE (2016 - 2020) |
|---|---|---|---|---|---|---|
| Share of spending in 2014 (15%) | $ 126.3 | $ 126.3 | $ 126.3 | $ 126.3 | $ 126.3 | $ 631.4 |
| Share of cost each year (15%) | $ 137.6 | $ 143.5 | $ 149.7 | $ 155.9 | $ 162.1 | $ 749.0 |
| **Difference / funding gap** | **$ (11.3)** | **$ (17.2)** | **$ (23.4)** | **$ (29.6)** | **$ (35.8)** | **$ (117.6)** |

## Individuals / private sector

In 2014, individuals who obtained their supplies from the private sector, and a small number of employer-sponsored health schemes, spent more than **$447 million** on contraceptive supplies. This represented **54%** of the total amount spent on supplies that year across the 69 FP2020 focus countries.

Under Scenario A, maintaining that **54%** share in 2016 would have required **$487.4 million** – **$40.3 million** more than individuals and the private sector spent in 2014 (Table 57). To maintain a **54%** share in 2020 will require **$574 million** – **$126.9 million** more than they spent in 2014. If spending on supplies by individuals remains static at 2014 levels, their contribution in 2020 would fall to only **42%** of the consumption cost estimated in Scenario A.

**TABLE 57. SHARE OF SPENDING, COST, AND FUNDING GAP INDIVIDUALS (PRIVATE SECTOR)** — **69 FP2020 FOCUS COUNTRIES: SCENARIO A**

| * Estimates in millions | 2016 | 2017 | 2018 | 2019 | 2020 | CUMULATIVE (2016 - 2020) |
|---|---|---|---|---|---|---|
| Share of spending in 2014 (54%) | $ 447.1 | $ 447.1 | $ 447.1 | $ 447.1 | $ 447.1 | $ 2,235.0 |
| Share of cost each year (54%) | $ 487.4 | $ 508.2 | $ 530.1 | $ 551.9 | $ 574.0 | $ 2,651.0 |
| **Difference / funding gap** | **$ (40.3)** | **$ (61.1)** | **$ (83.0)** | **$ (104.8)** | **$ (126.9)** | **$ (416.0)** |

## Public sector / donors + governments

If we look at public sector spending as a whole, the combined contribution of donors and governments in 2014 (**$374.7 million**) accounted for **46%** of the total amount spent on supplies across the 69 FP2020 countries. In 2016, **46%** of the total supplies consumption cost was **$408.5 million** (Table 58). This is nearly **34 million** more than the public sector spent on supplies in 2014.

In Scenario A, **46%** of the supplies consumption cost in the year 2020 is over **$481 million**. This is **$106 million** more than the public sector spent on supplies in 2014.

**TABLE 58. SHARE OF SPENDING, COST, AND FUNDING GAP PUBLIC SECTOR (DONORS + GOVERNMENTS)** — **69 FP2020 FOCUS COUNTRIES: SCENARIO A**

| * Estimates in millions | 2016 | 2017 | 2018 | 2019 | 2020 | CUMULATIVE (2016 - 2020) |
|---|---|---|---|---|---|---|
| Share of spending in 2014 (46%) | $ 374.7 | $ 374.7 | $ 374.7 | $ 374.7 | $ 374.7 | $ 1,873.0 |
| Share of cost each year (46%) | $ 408.5 | $ 425.9 | $ 444.2 | $ 462.5 | $ 481.0 | $ 2,222.0 |
| **Difference / funding gap** | **$ (33.8)** | **$ (51.2)** | **$ (69.5)** | **$ (87.8)** | **$ (106.3)** | **$ (349.0)** |

## Cost burden shift if public sector funding does not increase

If increases in public sector (donors and governments combined) spending are not forthcoming and the level of funding for supplies remains constant between 2014 and 2020, the relative contribution of the public sector to total costs would drop and a greater cost burden would fall to out-of-pocket spending by individuals.

Across the 69 FP2020 focus countries, the public sector's **$374.7 million** contribution – which represents **46%** of total spending on supplies in 2014 – would in 2020 cover only **36%** of the supplies consumption cost under Scenario A. The balance of the cost – **$680.3 million** – would be borne by individuals spending out-of-pocket for supplies (Figure 22; Table 59)

**FIGURE 22. SHIFTS IN THE DISTRIBUTION OF COST IN 2020**
69 FP2020 FOCUS COUNTRIES: SCENARIO A

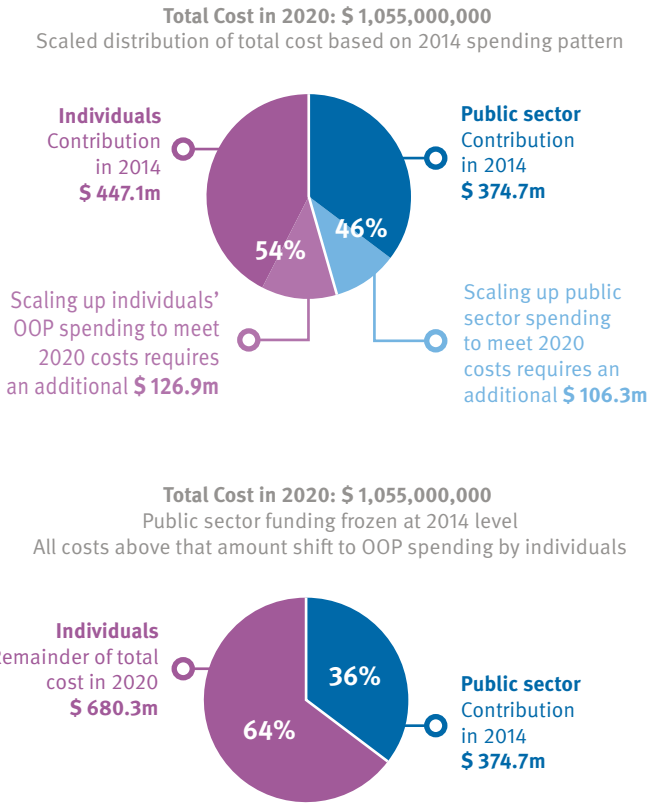



**TABLE 59. COST BURDEN SHIFT IN 2020 IF PUBLIC SECTOR SPENDING STALLS AT 2014 LEVELS**
**69 LMI COUNTRIES: SCENARIO A**

| | Scenario A | |
|---|---|---|
| **Total cost in 2020** | **$ 1,055,000,000** | |
| | **Public Sector** | **Individuals** |
| **Contribution at 2014 level** | **$ 374,700,000** | **$ 447,100,000** |
| Scaled increase to meet 2020 costs | - | $ 126,900,000 |
| Remainder of 2020 costs | - | $ 106,300,000 |
| **Total contribution to cost in 2020** | **$ 374,700,000** | **$ 680,300,000** |

# The path to 2020 | Scenario B

Scenario B envisions the achievement of the FP2020 goal: to add, in the world's 69 lowest-income countries, 120 million more users of contraception by the year 2020 than there were at the time of the London Summit on Family Planning in 2012.

Scenario B responds to the questions posed by donors, governments, advocates, and technical experts at the start of the CGA project: as the year 2020 draws near, what volume of supplies, and of which methods, will an unprecedented number of users of contraception consume? How much will these supplies cost? How do the projected totals compare to actual spending on supplies at the most recent measurable level? And how might the anticipated cost be distributed among donors, governments, and those individuals who obtain their supplies through the private sector?

In 2016 there were more than **300 million** women using modern methods of contraception living in the 69 FP2020 focus countries (Table 60). Under Scenario B, this number grows to more than **390 million** women in the year 2020. This is an increase of **30%**, or nearly **90 million** women, over four years.

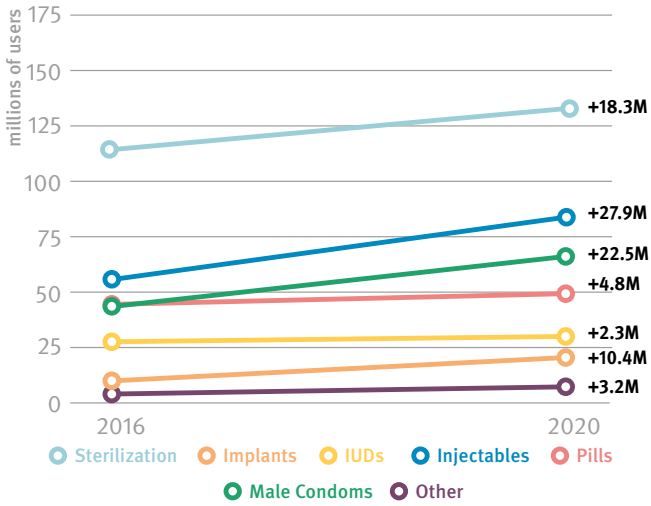
**TABLE 60. NUMBER OF USERS OF EACH CONTRACEPTIVE METHOD, 2016 - 2020**
**69 FP2020 FOCUS COUNTRIES: SCENARIO B**

| * Estimates in millions | 2016 | 2017 | 2018 | 2019 | 2020 | CHANGE (2016 - 2020) | |
|---|---|---|---|---|---|---|---|
| **All Methods** | **300.3** | **322.7** | **345.2** | **367.6** | **390.1** | **89.8** | **30%** |
| Sterilization | 114.4 | 121.6 | 125.4 | 129.2 | 132.8 | 18.3 | 16% |
| Implants | 10.0 | 12.2 | 14.7 | 17.5 | 20.5 | 10.4 | 103% |
| IUDs | 27.6 | 27.7 | 28.5 | 29.3 | 30.0 | 2.3 | 9% |
| Injectables | 55.8 | 61.5 | 68.7 | 76.1 | 83.8 | 27.9 | 50% |
| Pills | 44.5 | 45.7 | 47.2 | 48.4 | 49.3 | 4.8 | 11% |
| Male Condoms | 43.6 | 48.9 | 54.7 | 60.4 | 66.1 | 22.5 | 52% |
| Other | 4.0 | 4.8 | 5.6 | 6.5 | 7.3 | 3.2 | 80% |

Under Scenario B, the method that shows the largest increase in the absolute number of users is injectables; an estimated **28 million** users will be added by the year 2020 (Figure 23). The method with the next largest increase in absolute numbers is male condoms; the number of women who rely on this method will grow by **22.5 million**, from **43.6 million** in 2016 to **66.1 million** in 2020.

The method with the largest percentage growth is implants: the number of users increases **103%** from 2016 to 2020. IUDs show the most modest growth, increasing from **27.6 million** in 2016 to **27.9 million** in 2020. While the number of users of "other methods" grows by **79%**, this category represents the smallest number of users in 2016. In 2020, there are **7.3 million** users of "other" methods, representing just representing just **2%** of the method mix.

**FIGURE 23. CHANGE IN NUMBER OF USERS PER METHOD, 2016-2020**
**69 FP2020 FOCUS COUNTRIES: SCENARIO B**




Despite a relatively small percentage increase in users and a declining percentage of total method use, sterilization retains the largest share of the method mix: **38%** in 2016 and **34%** in 2020 (Table 61).

While all methods gained users in absolute terms, the other methods besides sterilization that decline in share of method mix are IUDs (from **9%** in 2016 to **8%** in 2020) and pills (from **15%** in 2016 to **13%** in 2020).

**TABLE 61. METHOD MIX, 2016 - 2020**
**69 FP2020 FOCUS COUNTRIES: SCENARIO B**

| | 2016 | 2017 | 2018 | 2019 | 2020 |
|---|---|---|---|---|---|
| Sterilization | 38% | 38% | 36% | 35% | 34% |
| Implants | 3% | 4% | 4% | 5% | 5% |
| IUDs | 9% | 9% | 8% | 8% | 8% |
| Injectables | 19% | 19% | 20% | 21% | 21% |
| Pills | 15% | 14% | 14% | 13% | 13% |
| Male Condoms | 15% | 15% | 16% | 16% | 17% |
| Other | 1% | 2% | 2% | 2% | 2% |

# Quantity and cost of supplies consumed by users of contraception

Just as the number of users of each method of contraception increases more steeply under Scenario B than Scenario A, the quantities of supplies required for user consumption are also greater. These larger consumption quantities (Table 62) drive the higher consumption costs projected under Scenario B.

**TABLE 62. CONSUMPTION QUANTITIES FOR EACH CONTRACEPTIVE METHOD, 2016 - 2020**
**69 FP2020 FOCUS COUNTRIES: SCENARIO B**

| * Estimates in millions | 2016 | 2017 | 2018 | 2019 | 2020 | CUMULATIVE TOTAL | CHANGE (2016 - 2020) | |
|---|---|---|---|---|---|---|---|---|
| Sterilization | 9.0 | 9.5 | 9.8 | 10.1 | 10.4 | 49.1 | 1.4 | 16% |
| Implants | 3.9 | 5.8 | 6.7 | 7.7 | 8.8 | 33.1 | 4.9 | 124% |
| IUDs | 6.2 | 8.0 | 8.0 | 8.1 | 8.2 | 38.7 | 1.9 | 31% |
| Injectables | 228.7 | 252.6 | 282.9 | 314.3 | 346.3 | 1,425.0 | 117.6 | 51% |
| Pills | 623.4 | 640.5 | 661.5 | 678.1 | 691.5 | 3,295.0 | 68.0 | 11% |
| Male Condoms | 3,361.0 | 3,770.0 | 4,214.0 | 4,655.0 | 5,096.0 | 21,100.0 | 1,734.0 | 52% |
| Other | 45.0 | 57.3 | 69.2 | 81.6 | 94.4 | 347.7 | 49.3 | 109% |

In 2016, the more than **300 million** users of contraception living in the 69 FP2020 focus countries consumed supplies costing **$896 million** (Table 63).

If the FP2020 goal were to be achieved in the year 2020, a total of more than **390 million** users of contraception would require **$1.259 billion** in supplies for personal consumption. This is a consumption cost increase of **41%**, or **$363 million**, over four years.

The method that shows the greatest percentage growth in cost is implants, at **123%**. The method showing the greatest increase in absolute cost is injectables, which has a consumption cost that is nearly **$213 million** higher in 2020 than in 2016.

**TABLE 63. CONSUMPTION COSTS FOR EACH CONTRACEPTIVE METHOD, 2016 - 2020**
**69 FP2020 FOCUS COUNTRIES: SCENARIO B**

| * Estimates in millions | 2016 | 2017 | 2018 | 2019 | 2020 | CUMULATIVE TOTAL | CHANGE (2016 - 2020) | |
|---|---|---|---|---|---|---|---|---|
| **All Methods** | **$ 896.0** | **$ 985.6** | **$ 1,076.0** | **$ 1,167.0** | **$ 1,259.0** | **$ 5,384.0** | **$ 363.2** | **41%** |
| Sterilization | $ 30.6 | $ 32.5 | $ 33.6 | $ 34.6 | $ 35.6 | $ 167.2 | $ 4.9 | 16% |
| Implants | $ 41.6 | $ 60.8 | $ 70.9 | $ 81.6 | $ 92.9 | $ 348.0 | $ 51.2 | 123% |
| IUDs | $ 11.6 | $ 13.9 | $ 14.5 | $ 14.6 | $ 14.8 | $ 69.7 | $ 3.2 | 28% |
| Injectables | $ 398.2 | $ 442.2 | $ 496.9 | $ 553.4 | $ 611.2 | $ 2,502.0 | $ 212.9 | 53% |
| Pills | $ 324.6 | $ 335.0 | $ 347.2 | $ 357.7 | $ 366.9 | $ 1,731.0 | $ 42.3 | 13% |
| Male Condoms | $ 76.1 | $ 85.1 | $ 94.4 | $ 103.6 | $ 112.9 | $ 472.3 | $ 36.7 | 48% |
| Other | $ 12.8 | $ 15.7 | $ 18.6 | $ 21.6 | $ 24.6 | $ 93.5 | $ 11.8 | 92% |

## Sterilization

Under Scenario B, the number of women who rely on sterilization rises from **114.4 million** in 2016 to **132.8 million** in 2020 – a modest increase of **16%** (Table 64). The share of method mix represented by sterilization declines from **38%** in 2016 to **34%** in 2020, which reflects both women aging out of the category of contraceptive users and more new users choosing other methods. An estimated **10.4 million** sterilization kits will be consumed in 2020, at a cost of **$35.6 million**, compared to **9 million** kits at a cost of **$30.6 million** in 2016.

**TABLE 64. STERILIZATION** — **69 FP2020 FOCUS COUNTRIES: SCENARIO B**

| * Estimates in millions | 2016 | 2017 | 2018 | 2019 | 2020 | CUMULATIVE TOTAL | CHANGE 2016 - 2020 | |
|---|---|---|---|---|---|---|---|---|
| Number of users | 114.4 | 121.6 | 125.4 | 129.2 | 132.8 | | 18.3 | 16% |
| Method mix share | 38% | 38% | 36% | 35% | 34% | | | |
| Consumption quantity | 9.0 | 9.5 | 9.8 | 10.1 | 10.4 | 49.1 | 1.4 | 16% |
| Consumption cost | $ 30.6 | $ 32.5 | $ 33.6 | $ 34.6 | $ 35.6 | $ 167.2 | $ 4.9 | 16% |

## Implants

Under Scenario B, the number of women using contraceptive implants increases by **103%** between 2016 and 2020, from **10 million** to **20.5 million** (Table 65). The share of method mix represented by implants increases slightly, from **3%** in 2016 to **5%** in 2020.

Under this scenario an estimated **8.8 million** implants will be inserted in 2020, which is **4.9 million** more than in 2016 (an increase of **124%**). The **8.8 million** implants cost **$92.9 million**; which is **123%** higher than the implant consumption cost in 2016.

**TABLE 65. IMPLANTS** — **69 FP2020 FOCUS COUNTRIES: SCENARIO B**

| * Estimates in millions | 2016 | 2017 | 2018 | 2019 | 2020 | CUMULATIVE TOTAL | CHANGE 2016 - 2020 | |
|---|---|---|---|---|---|---|---|---|
| Number of users | 10.0 | 12.2 | 14.7 | 17.5 | 20.5 | | 10.4 | 103% |
| Method mix share | 3% | 4% | 4% | 5% | 5% | | | |
| Consumption quantity | 3.9 | 5.8 | 6.7 | 7.7 | 8.8 | 33.1 | 4.9 | 124% |
| Consumption cost | $ 41.6 | $ 60.8 | $ 70.9 | $ 81.6 | $ 92.9 | $ 348.0 | $ 51.2 | 123% |

## IUDs

Under Scenario B, the number of users of IUDs grows from **27.6 million** in 2016 to **30 million** in 2020 (Table 66). The share of method mix represented by IUDs dips very slightly, from **9%** to **8%**.

In 2020 8.2 million IUDs will be inserted, up from **6.2 million** in 2016. The consumption cost of IUDs in 2020 is **$14.8 million**; this is **$3.2 million** more than the cost in 2016 (**$11.6 million**).

**TABLE 66. IUDS** — **69 FP2020 FOCUS COUNTRIES: SCENARIO B**

| * Estimates in millions | 2016 | 2017 | 2018 | 2019 | 2020 | CUMULATIVE TOTAL | CHANGE 2016 - 2020 | |
|---|---|---|---|---|---|---|---|---|
| Number of users | 27.6 | 27.7 | 28.5 | 29.3 | 30.0 | | 2.3 | 9% |
| Method mix share | 9% | 9% | 8% | 8% | 8% | | | |
| Consumption quantity | 6.2 | 8.0 | 8.0 | 8.1 | 8.2 | 38.7 | 1.9 | 31% |
| Consumption cost | $ 11.6 | $ 13.9 | $ 14.5 | $ 14.6 | $ 14.8 | $ 69.7 | $ 3.2 | 28% |

## Injectables

By 2020, the number of injectable users will grow by **50%** to **83.8 million** (Table 67). Under Scenario B, injectables will represent **21%** of the method mix in 2020, compared to **19%** in 2016. By 2020, the consumption cost of injectables will reach more than **$611 million** – nearly **$213 million** more than the consumption cost in 2016.

**TABLE 67. INJECTABLES** — **69 FP2020 FOCUS COUNTRIES: SCENARIO B**

| * Estimates in millions | 2016 | 2017 | 2018 | 2019 | 2020 | CUMULATIVE TOTAL | CHANGE 2016 - 2020 | |
|---|---|---|---|---|---|---|---|---|
| Number of users | 55.8 | 61.5 | 68.7 | 76.1 | 83.8 | | 27.9 | 50% |
| Method mix share | 19% | 19% | 20% | 21% | 21% | | | |
| Consumption quantity | 228.7 | 252.6 | 282.9 | 314.3 | 346.3 | 1,425.0 | 117.6 | 51% |
| Consumption cost | $ 398.2 | $ 442.2 | $ 496.9 | $ 553.4 | $ 611.2 | $ 2,502.0 | $212.9 | 53% |

## Pills

Under Scenario B, the number of women using contraceptive pills will reach **49.3 million** by 2020 — an increase of **11%** over the number of pill users in 2016 (Table 68). Due to shifts in consumption patterns, however, pills will represent a smaller share of method mix in 2020 (**13%**) than in 2016 (**15%**). Users will consume **691.5 million** pill cycles in 2020, at a total cost of nearly **$367 million**.

**TABLE 68. PILLS** — **69 FP2020 FOCUS COUNTRIES: SCENARIO B**

| * Estimates in millions | 2016 | 2017 | 2018 | 2019 | 2020 | CUMULATIVE TOTAL | CHANGE 2016 - 2020 | |
|---|---|---|---|---|---|---|---|---|
| Number of users | 44.5 | 45.7 | 47.2 | 48.4 | 49.3 | | 4.8 | 11% |
| Method mix share | 15% | 14% | 14% | 13% | 13% | | | |
| Consumption quantity | 623.4 | 640.5 | 661.5 | 678.1 | 691.5 | 3,295.0 | 68.0 | 11% |
| Consumption cost | $ 324.6 | $ 335.0 | $ 347.2 | $ 357.7 | $ 366.9 | $ 1,731.0 | $ 42.3 | 13% |

## Male condoms

Under Scenario B, the number of women relying on male condoms as their method of contraception will reach **66 million** by the year 2020 — a **52%** increase compared to 2016 (Table 69).

The quantities of male condoms themselves will exceed **5 billion**, which is **52%** higher than the quantities consumed in 2016. The consumption cost will be **$112.9 million**, which is **48%** higher than the cost in 2016.

**TABLE 69. MALE CONDOMS** — **69 FP2020 FOCUS COUNTRIES: SCENARIO B**

| * Estimates in millions | 2016 | 2017 | 2018 | 2019 | 2020 | CUMULATIVE TOTAL | CHANGE 2016 - 2020 | |
|---|---|---|---|---|---|---|---|---|
| Number of users | 43.6 | 48.9 | 54.7 | 60.4 | 66.1 | | 22.5 | 52% |
| Method mix share | 15% | 15% | 16% | 16% | 17% | | | |
| Consumption quantity | 3,361.0 | 3,770.0 | 4,214.0 | 4,655.0 | 5,096.0 | 21,100.0 | 1,734.0 | 52% |
| Consumption cost | $ 76.1 | $ 85.1 | $ 94.4 | $ 103.6 | $ 112.9 | $ 472.3 | $ 36.7 | 48% |

# The funding gap

In 2014 – the most recent year with sufficient data for all 69 FP2020 focus countries – total spending on contraceptive supplies from all sources amounted to **$821.8 million** (Table 70). Throughout this report, that amount has served as our baseline for quantifying the amount of additional funding required to purchase the quantities of supplies projected under Scenarios A and now B.

This amount comprises spending by donors (including direct spending, monetary contributions, in-kind contributions, basket funds, and loans), the governments of the 69 countries (using non-donor funds), and individuals who pay out-of-pocket to obtain supplies from the private sector. For the 69 FP2020 countries, we attribute **30%** of the total amount spent to donors, **15%** to governments, and **54%** to individuals. By combining donor and government spending, we estimate **46%** of the total was contributed by the public sector.

More detail on our spending analysis can be found in Section 2.

**TABLE 70. TOTAL SPENDING ON CONTRACEPTIVE SUPPLIES IN 2014**

**69 FP2020 FOCUS COUNTRIES**

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Total spending on supplies | $ | 821,800,000 | | | | | |
| Combined Public Sector | $ | 374,700,000 | 46% | Donors only | $ | 248,400,000 | 30% |
| | | | | Governments only | $ | 126,300,000 | 15% |
| Individuals/Private Sector | $ | 447,100,000 | 54% | | | | |

## All sources / public + private sectors

If the FP2020 goal were achieved in the 69 focus countries, the supplies consumed by all users of contraception in the year 2020 would cost **$1.259 billion** (Table 71). This is **$437 million** more than the total amount spent on supplies in 2014 from all sources of funding.

**TABLE 71. TOTAL SPENDING, COST, AND FUNDING GAP ALL SOURCES (PUBLIC + PRIVATE SECTORS)** — **69 FP2020 FOCUS COUNTRIES: SCENARIO B**

| * Estimates in millions | 2016 | 2017 | 2018 | 2019 | 2020 | CUMULATIVE (2016 - 2020) |
|---|---|---|---|---|---|---|
| Total spending in 2014 | $ 821.8 | $ 821.8 | $ 821.8 | $ 821.8 | $ 821.8 | $ 4,108.0 |
| Total cost each year | $ 895.9 | $ 985.6 | $ 1,076.0 | $ 1,167.0 | $ 1,259.0 | $ 5,384.0 |
| **Difference / funding gap** | $ (74.1) | $ (163.8) | $ (254.2) | $ (345.2) | $ (437.2) | $ (1,276.0) |

## Donors

In 2014, donors contributed **$248.4 million** or roughly **30%** of the total amount spent on supplies. It is impossible to predict whether aggregate donor funding will increase or decrease as 2020 draws closer. If we assume that donors continue to contribute **30%** of total spending, their share by 2020 will reach **$380.6 million**. That is **$132 million** more than donors spent on supplies in 2014 (Table 72).

On the other hand, if donor funding in absolute terms remained constant at 2014 levels, then by 2020, their **$248.8 million** contribution would account for only **20%** of the total consumption cost under Scenario B. This assumes that governments and individuals would increase spending to fill the gap. If they couldn't, the result would be fewer users of contraception. Women cannot use contraceptive supplies they don't have.

**TABLE 72. SHARE OF SPENDING, COST, AND FUNDING GAP DONORS (PUBLIC SECTOR)** — **69 FP2020 FOCUS COUNTRIES: SCENARIO B**

| * Estimates in millions | 2016 | 2017 | 2018 | 2019 | 2020 | CUMULATIVE (2016 - 2020) |
|---|---|---|---|---|---|---|
| Share of spending in 2014 (30%) | $ 248.4 | $ 248.4 | $ 248.4 | $ 248.4 | $ 248.4 | $ 1,241.0 |
| Share of cost each year (30%) | $ 270.8 | $ 297.9 | $ 325.3 | $ 352.8 | $ 380.6 | $ 1,627.0 |
| **Difference / funding gap** | $ (22.4) | $ (49.5) | $ (76.9) | $ (104.4) | $ (132.2) | $ (386.0) |

## Governments

In 2014, the governments of the 69 FP2020 focus countries spent **$126.3 million** of non-donor, domestically generated funds on contraceptive supplies. This was equivalent to **15%** of total spending from all sources, and one-third of total public sector spending.

If the FP2020 goal were achieved, **15%** of the supplies consumption cost in 2020 would be **$193.5 million** (Table 73). Simply maintaining their relative share of the consumption cost would require governments to spend an additional **$67.2 million** in 2020 alone. If governments instead continued to spend **$126.3 million** annually, their contribution to the total consumption cost in 2020 would fall to **10%**.

**TABLE 73. SHARE OF SPENDING, COST, AND FUNDING GAP GOVERNMENTS (PUBLIC SECTOR)** — **69 FP2020 FOCUS COUNTRIES: SCENARIO B**

| * Estimates in millions | 2016 | 2017 | 2018 | 2019 | 2020 | CUMULATIVE (2016 - 2020) |
|---|---|---|---|---|---|---|
| Share of spending in 2014 (15%) | $ 126.3 | $ 126.3 | $ 126.3 | $ 126.3 | $ 126.3 | $ 631.4 |
| Share of cost each year (15%) | $ 137.6 | $ 151.4 | $ 165.4 | $ 179.4 | $ 193.5 | $ 827.5 |
| **Difference / funding gap** | $ (11.3) | $ (25.1) | $ (39.1) | $ (53.1) | $ (67.2) | $ (196.1) |

## Individuals / private sector

In 2014 individuals who obtained their supplies from the private sector (along with a relatively small contribution by employer-sponsored health schemes) spent **$447.1 million** or **54%** of total spending on contraceptive supplies (Table 74). If the FP2020 goal were achieved, the total consumption cost in 2020 would be **$1.259 billion**. **54%** of this amount would equate to **$685 million**, **$238 million** more than was spent by individuals in 2014.

**TABLE 74. SHARE OF SPENDING, COST, AND FUNDING GAP INDIVIDUALS (PRIVATE SECTOR)** — **69 FP2020 FOCUS COUNTRIES: SCENARIO B**

| * Estimates in millions | 2016 | 2017 | 2018 | 2019 | 2020 | CUMULATIVE (2016 - 2020) |
|---|---|---|---|---|---|---|
| Share of spending in 2014 (54%) | $ 447.1 | $ 447.1 | $ 447.1 | $ 447.1 | $ 447.1 | $ 2,235.0 |
| Share of cost each year (54%) | $ 487.4 | $ 536.2 | $ 585.6 | $ 635.1 | $ 685.1 | $ 2,929.0 |
| **Difference / funding gap** | $ (40.3) | $ (89.1) | $ (138.5) | $ (188.0) | $ (238.0) | $ (694.0) |

## Public sector / donors + governments

As noted above, combined spending by donors and governments across the 69 FP2020 focus countries amounted to nearly **$375 million** in 2014 (Table 75). This was **46%** of total spending; we attribute most of the remaining amount to out-of-pocket spending by individuals to purchase supplies through the private sector.

Under Scenario B, **46%** of the supplies consumption cost in 2020 will be nearly **$575 million**. To maintain their share of total spending, therefore, donors and governments must contribute **$200 million** more than they spent in 2014. If instead, the absolute levels of public sector spending were to remain constant at 2014 levels, it would amount to only **30%** of the total cost in 2020.

**TABLE 75. SHARE OF SPENDING, COST, AND FUNDING GAP PUBLIC SECTOR (DONORS + GOVERNMENTS)** — **69 FP2020 FOCUS COUNTRIES: SCENARIO B**

| * Estimates in millions | 2016 | 2017 | 2018 | 2019 | 2020 | CUMULATIVE (2016 - 2020) |
|---|---|---|---|---|---|---|
| Share of spending in 2014 (46%) | $ 374.7 | $ 374.7 | $ 374.7 | $ 374.7 | $ 374.7 | $ 1,873.0 |
| Share of cost each year (46%) | $ 408.5 | $ 449.4 | $ 490.7 | $ 532.3 | $ 574.1 | $ 2,455.0 |
| **Difference / funding gap** | $ (33.8) | $ (74.7) | $ (116.0) | $ (157.6) | $ (199.4) | $ (582.0) |

## Cost burden shift if public sector funding does not increase

It is often assumed that out-of-pocket spending by individuals will compensate for funding shortfalls in the public sector. While this may be true to a certain extent, the potential magnitude of the gap under Scenario B calls into question the feasibility of this solution (Figure 24, Table 76).

If the public sector were to contribute the same percentage of total spending in 2020 that it did 2014 (**46%**), its share would amount to nearly **$575 million**. If, however, the public sector contributed in 2020 the same absolute amount that it did in 2014 (**$374.7 million**), it would leave nearly **$200 million** of its share of the consumption cost unfunded.

If this were to occur, the only way to fund the entire projected consumption cost in 2020 would be for out-of-pocket spending by individuals to comprise (a) the absolute amount individuals spent in 2014, or **$447.1 million**; (b) the increase necessary to maintain individuals' **54%** share of total spending, or **$238 million**; and (c) the amount of the public sector funding gap, or **$199.4 million**. In total, the cost burden on individuals in 2020 would be **$884.5 million**, which is nearly twice as much as individuals spent on contraceptive supplies in 2014.

**FIGURE 24. SHIFTS IN THE DISTRIBUTION OF COST IN 2020**
69 FP2020 FOCUS COUNTRIES: SCENARIO B

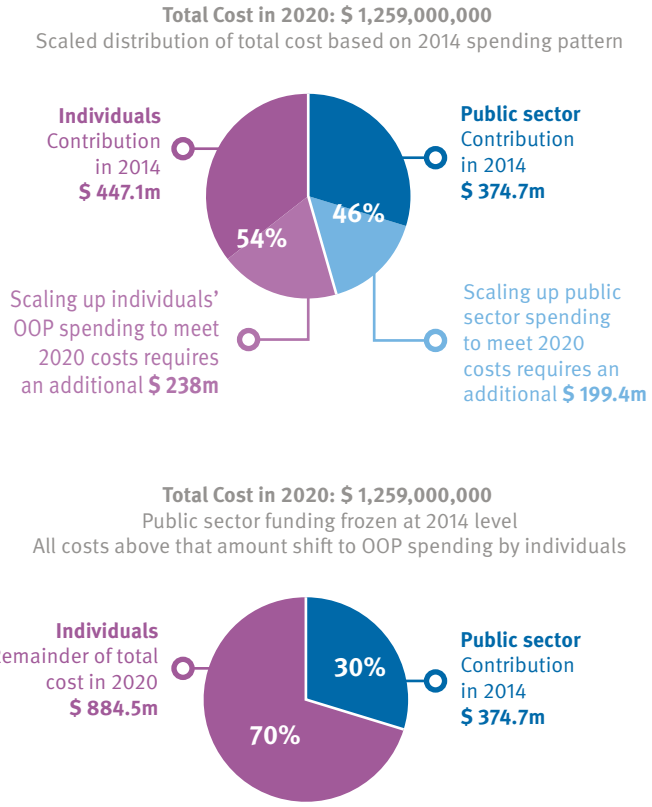



**TABLE 76. COST BURDEN SHIFT IN 2020 IF PUBLIC SECTOR SPENDING STALLS AT 2014 LEVELS**
**69 FP2020 FOCUS COUNTRIES: SCENARIO B**

| | Scenario B | |
|---|---|---|
| **Total cost in 2020** | **$ 1,259,000,000** | |
| | **Public Sector** | **Individuals** |
| **Contribution at 2014 level** | **$ 374,700,000** | **$ 447,100,000** |
| Scaled increase to meet 2020 costs | - | $ 238,000,000 |
| Remainder of 2020 costs | - | $ 199,400,000 |
| **Total contribution to cost in 2020** | **$ 374,700,000** | **$ 884,500,000** |

# SECTION 6

# Conclusion

In 2001, the working group that would soon become the Reproductive Health Supplies Coalition published the landmark report Contraceptive Projections and the Donor Gap. The report foresaw that the demand for modern methods of contraception would increasingly outstrip the available funding for supplies, and called on donors to increase their support by 5.3% annually. The concept of a "donor gap" and findings from the report became linchpins of advocacy on behalf of contraceptive supply security.

The updated Contraceptive Projections and the Donor Gap report, published in 2009, revealed that the global community's efforts in the intervening years were a success: the availability of contraceptive supplies had largely kept pace with demand. The 2009 report also warned that this demand would continue to grow, making further increases in funding a necessity.

RHSC's Global Contraceptive Commodity Gap Analysis 2016 (CGA-2016) builds on the success of these earlier reports. Like its predecessors, it quantifies the gap between the amount spent on contraceptive supplies at the most recent measurable level and the amount of funding that will be needed in the future to meet increasing levels of demand. It also goes beyond the remit of the earlier reports in several key respects.

## Bridging gaps in understanding

As we conducted our stakeholder consultation and convened technical experts to discuss the various information needs the CGA-2016 might fill, we realized we needed to undertake two distinct but equally important tasks. The first task was to update the work of the previous RHSC gap analyses by producing a new set of estimates. The second task was to understand and negotiate the particular ways different stakeholder constituencies conceptualize a "gap."

Some donors, for example, told us they want to know the "gap" between the amount currently spent on supplies and the cost of the supplies needed to meet the aspirational goal of increasing contraceptive use among all women; other donors want to know the "gap" between current spending and the cost of supplies at relatively conservative projected levels of use. Donors also want to know the "gap" between current spending and the projected cost of the supplies that will be required by public sector health systems in priority countries, as well as the "gap" between current spending and the projected amounts that will be requested by priority country governments for public sector procurement of supplies. Producing estimates that respond to each of these needs requires different analyses and a range of data sources and methodologies.

We learned that innovator manufacturers are often less interested in user or systemic demand than they are in what government and institutional procurers will order over the next two to three years. Generic manufacturers often want to know the projected growth in demand for particular contraceptive methods for entire markets. Technical experts want to know if significant changes in demand for a particular method are occurring, and advocates want to know the cost of achieving goals (and whether donors, governments, and institutions are keeping their spending commitments).

By engaging the community of RHSC members, we learned that even deceptively simple terms like "demand" and "consumption" mean very different things in different contexts. In the context of political goals and demographic analysis, "demand" refers to the desire of individual women and girls to use modern contraception (regardless of which sector provides the supplies). In the context of institutional procurement and donor funding for supplies, "demand" refers to the volume of supplies a government needs to purchase for the public sector health system. "Consumption" may refer to the quantity of supplies dispensed to an individual client or the volume shipped to a government for distribution though the public sector health system.

Ultimately, the experts involved in producing the CGA-2016 had to agree upon a common lexicon to distinguish between the volume of supplies consumed by individual users, the volume of supplies requested by a government as part of its supply plan, and the volume of supplies ultimately procured and shipped to a country.

## Transparency: an improving trend

RHSC used its strength as a global convening platform to bring experts together for frank discussions of the strengths and limitations of different data sources and methodologies. Transparency on the part of Avenir Health and the UN Population Division (on contraceptive use), the Guttmacher Institute (on commodity pricing), and UNFPA and NIDI (on spending by donors, NGOs, and governments) made it possible to blend data and sequence methodologies in order to produce a coherent over-arching analysis.

Greater transparency is a priority area for the next iteration of the CGA. Many quantification reports and procurement plans are not publically available. While quantification reports arguably provide the best estimates of what countries plan to procure in the immediate future, they are not always shareable without government permission. As a result, the team from CHAI and JSI that produced the CGA procurement analysis was able to share only aggregate outputs from the 20 countries included.

In the next CGA, scheduled for publication in 2017, we hope to have greater visibility into country specific procurement plans. Such visibility is not only useful to assess potential funding gaps, it is the only way to assess the relative value of methodologies, since the accuracy of their predictions is, ultimately, an empirical question. As a community, we must be able to compare what countries eventually do order to what was predicted they would order. As long as the predictions remain obscured, the validity of the methodology remains a matter of faith, rather than evidence.

# Moving forward

Along with a focus on improving the transparency and predictive value of our procurement analysis, the CGA-2017 will engage more technical experts and utilize additional data sources, particularly in regard to the private sector's role in contraceptive supply security. More information is needed on contraceptives provided through employer-sponsored health services and health insurance schemes that cover contraceptive costs. We also need more refined data on contraceptive commodity prices at the commercial retail level. Better insight into these areas will help us more accurately estimate the amount of spending on contraceptive supplies contributed by individuals and corporations. This information, along with newly available data on public sector spending, will contribute to the updated spending analysis that will be part of the CGA-2017 report.

We also hope to develop a better understanding of the relationship between the quantity of supplies consumed by users of particular contraceptive methods and the quantity that must be procured at a systemic level to meet user demand. This is an important step towards closing the distance between our demographic and procurement analyses.

Since the completion of the CGA-2016 analysis, political changes have taken place in the United States that could have a profound impact on development assistance in general and funding for reproductive health in particular.

To estimate potential funding gaps in 2020, we considered only two possible spending scenarios: that spending on family planning supplies would hold steady at the absolute amount spent in 2014, or that each type of spender (donors, governments, and individuals) would fund the same respective share of the total cost that they did in 2014. We must now consider the very real possibility that donor funding for reproductive health will decrease. Should that happen, it could have a dramatic effect on the availability of family planning supplies and the number of women who can access contraception. Therefore, we must explore in a more nuanced way the implications of several new spending scenarios.

The CGA-2016 shows that individual women in the world's lowest income countries spend more than donors and governments combined to purchase family planning supplies. The next iteration of the CGA will explore the ramifications of funding cuts by including a scenario in which there is an absolute decline in the amount of funding available for contraceptive supplies. If the global reproductive health community is truly committed to expanding access to contraception to those least able to afford it, we must step up as never before to ensure sufficient resources are available.

# SECTION 7

## Notes on Methodologies and Data Sources

# Spending on Contraceptive Supplies

## Provided by: Michelle Weinberger and John Stover, Avenir Health

### Calculating the total amount spent on contraceptive commodities in 2014

- UNFPA Supplies was the source for the amount spent by donors and NGOs. The amount attributed to male condoms was adjusted to remove the amount dedicated to condoms used for HIV prevention (30% of the total were assumed to be for contraception). This information was available for **116 countries**.
- The Contraceptive Security (CS) Indicators database was used as the source for government spending (internal) and for some donor spending (e.g. World Bank loans, basket funding used to purchase contraceptive supplies). This information was available for **49 countries** (note: in some countries available data showed $0 in spending).
- NIDI data was used to determine the amount spent on commodities by donors, governments, NGOs, and corporations. Amounts were also adjusted to remove spending on condoms for HIV prevention (30% of condoms were assumed to be for contraception). This information was used for **46 countries** (note: if CS Indicator data was available, this was used instead of NIDI estimates for the amount spent by governments).
- Private sector costs were calculated as follows:
    - DHS data on source by method (for countries without data, regional averages were used) were used to calculate the volume of commodities consumed in 2014 that would have come via the private sector for each method.
    - Next, the country specific unit prices (see below) were used to monetize these commodities. This was done using the prices data from Adding It Up, though these largely reflect the public sector. However, monetizing all commodities at a single cost per country allows for easy comparison. The actual expenditure may have been higher or lower, depending on actual costs incurred in the private sector.

# Generating Scenarios A and B

## Provided by: Michelle Weinberger and John Ross, Avenir Health

### Generating Scenarios A and B

**Scenario A** was calculated for each country, using mCPR trends as follows:

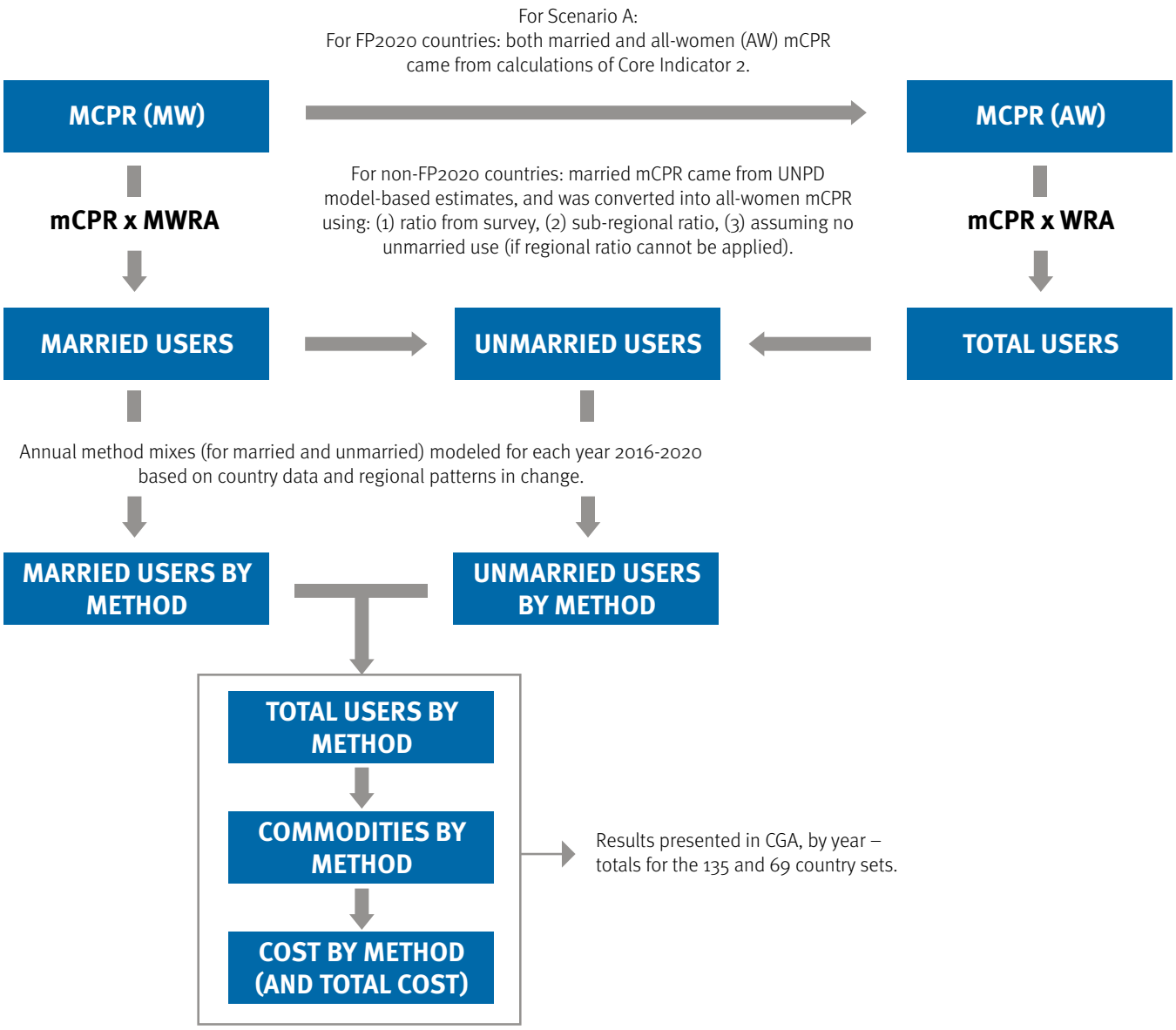
- For FP2020 countries: Scenario A uses the mCPR trends projected to 2020 in line with the 2016 FP2020 Progress Report. These trends are based on the medium variant produced by the FPET model.
- For non-FP2020 countries: Scenario A uses the medium variant of mCPR (married) from UNPD's model-based estimates. The married mCPR was converted to an all-women mCPR using a ratio from a country survey (when available), a regional ratio, or in some cases an assumption of no unmarried use (when the regional ratio was not appropriate).
- Calculation of users by method, commodities, and costs follow the approach shown in the figure on the following page.

**Scenario B** was calculated on the aggregate, not by country, as follows:

- For FP2020 countries: The total number of users needed in 2020 was calculated by adding 120 million to the baseline 2012 modern contraceptive user number; these users were then distributed by method using the average annual method mix calculated for the 69 countries. Finally, commodities and commodity costs were calculated using the average annual commodities per user, and cost per commodity by method calculated for the 69 countries. Since we do not know the distribution of additional users that would exist in each country if the "120m by 2020" goal was met, it was assumed that results would be proportional to what would happen if all countries saw very rapid growth.
- For non FP2020 countries: It was assumed there would be some ripple effect in the 66 remaining countries of the 135 LMI country set. If the 69 countries experienced acceleration in line with reaching the "120m x 2020" goal, it is possible that the remaining countries would also experience acceleration due to a "demonstration effect," and/or the potential wider availability of commodities due to increased production and potential price reductions. However, given that these countries are less of a focus for the global family planning community, it was assumed that the 'acceleration' effect would be only half of that experienced in the FP2020 countries. Users by method, commodities, and costs were calculated as described above.

## GENERAL APPROACH TO CALCULATING SCENARIO A

(repeated each year then summed)




### Projecting shifts in method mix

For the purposes of the CGA, we recognized that it was not only important to project future scenarios for the total number of modern contraceptive users, but also to project potential shifts to the methods these women will use. This is important because shifts in method mix have implications for both future commodity needs and total costs. For the purposes of this analysis, the same underlying changes in method mix were used across both scenarios.

- Baseline method mixes were established for each country, for married and unmarried users separately:
  - For the married method mix, at least one survey with the married method mix was available for all countries in the analysis; the most recently available estimate were used. These were largely taken from UNPD's World Contraceptive Use 2016 wall chart[25]; however, some data was updated to reflect newly available surveys.

- For the unmarried method mix, data was limited to DHS surveys, from which 59 countries had survey data available. For the remaining countries, the median method mix from the available data was used, split by SSA and non-SSA countries (there was not enough data to produce regional estimates).

- Method mixes were then projected forward, first from the date of the latest survey to 2014 (the baseline year for this analysis). They were then projected for each year from 2014 to 2016.
  - For the married method mix, sub-regional annual changes in method mix were calculated from the last two surveys available in each country. The annual changes were applied to the previous year's method mix, with some rules applied: for example, method use was not allowed to decline to zero.
  - For the unmarried method mix, due to the more limited data available, average annual changes were calculated for just two sub-areas: SSA and non-SSA, to reflect different patterns of use and change seen in these geographies. The average annual changes were applied to the previous year's method mix, applying the same rules used for married women.

## Calculating commodities needed by users

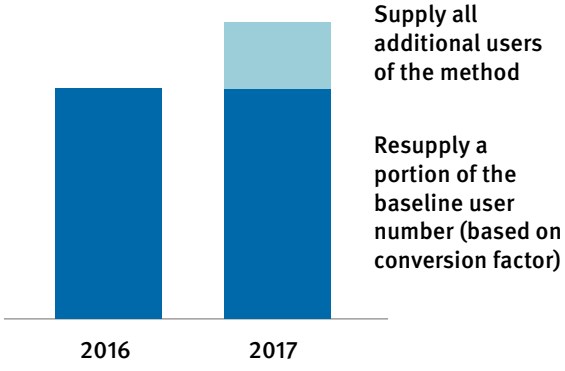
**Short-term methods:** The number of commodities required per method type is based on estimates used in Adding It Up, which calculates the number of commodities needed per user per year. This is slightly lower than the CYP factor, because the CYP factor does not account for method failure.

For injectables, since each type of injectable has a different conversion factor, a weighted factor was created for each country using country-specific data on the volume of each type of injectable that was procured, again, based on analysis for Adding It Up. (Note: the factors used for other modern methods are not from Adding It Up. This was a calculated weighted average, assuming a mix of female condoms, other coital based methods, and diaphragms).

| COMMODITY | UNITS NEEDED PER USER |
|---|---|
| Condoms | 77 |
| Pills | 14 |
| Injectables: 1 mo | 13 |
| Injectables: 2 mo | 6 |
| Injectables: 3 mo | 4 |
| Emergency contraception | 14 |
| Other modern methods | 24 |

**Long-acting methods:** For implants and IUDs, calculations need to account for the fact that some women who received their method in a previous year will still be using the method. To better account for the potential of rapid scale up of methods, IUD and implant commodities were calculated as follows:

- Increase in users from previous year = 1 commodity/service each
- Remaining users= multiply by conversion factor to calculate resupply needed
- For each country, a country specific conversion factor was created, based on data from Adding It Up on the mix of types of IUDs and implants procured in each country. The factors are a weighted average of the CYP factors for each type of IUD (copper-T, IUS), and each type of implant (3,4, or 5 year) used in the country.




For sterilization, the total number of users was divided by the CYP factor (10 globally, 13 for Bangladesh, India and Pakistan) to estimate the total number of sterilizations that would happen in each year. The 'commodity' associated with this is a sterilization kit.

## Calculating the cost of consumption

Costs were calculated by simply multiplying the commodities quantity by the unit cost for each method. For this analysis, country-specific unit costs were calculated (including commodities + supplies) from Adding It Up for male and female sterilization, implants, IUDs, injectables, pills and male condoms. The country costs account for variations in the prices paid in different countries, as well as different mixes of brands/types of methods used (e.g. different condom brands, or different mixes of 1, 2, and 3 month injectables). For countries that were missing data, global unit costs were used.

A global "other" modern methods cost was calculated using the weighted average of the costs of female condoms, diaphragms, and other vaginal barrier methods, as well as the unit cost of EC based on global UNFPA Supplies pricing.

## Summary of data sources

| INDICATOR/INPUT | SOURCE(S)/CALCULATION |
|---|---|
| **Women of Reproductive Age (WRA)** | UNPD World Population Prospects (2015 Revision)[26]<br>Country-produced projections for some FP2020 countries, in line with values used for Core Indicator estimates.<br><br>Note: data was missing for Marshall Islands, Palau, Tuvalu and Dominica (calculations were made to estimate population). |
| **Married women of reproductive age (MWRA)** | Estimates and Projections of the Number of Women Aged 15-49 Who Are Married or in a Union -2016 Revision[27]: % married applied to total WRA from above.<br><br>Note: data was missing for Dominica (proxy country used). |
| **mCPR (married)** | UNPD model-based estimates FP2020 Core Indicator results from the FPET model, which uses surveys and, in some countries, service statistics to inform estimates of mCPR growth.<br><br>Note that mCPR for married women is not an FP2020 Core Indicator per se, but is used to produce Indicator #2 (mCPR for all women). |
| **mCPR (all women)** | FP2020 Core Indicator 2, or, converted from UNPD modeled-estimate of married mCPR. |
| **Ratio of married to all women use** | From most recent DHS survey. Regional averages calculated from available data. |
| **Baseline method mix (married)** | From the most recent survey- including DHS, MICS, national surveys and PMA2020. |
| **Baseline method mix (unmarried)** | From most recent DHS, or, median for SSA or non-SSA countries when data was missing. |
| **Average annual change in method mix (married)** | Calculated by sub-region from all available surveys, including DHS, MICS, national surveys and PMA2020. |
| **Average annual change in method mix (unmarried)** | Calculated from all available DHS data, for SSA and non-SSA separately. |
| **Commodities per user** | Based on Adding it Up—country specific averages calculated from AIU data for methods with multiple durations (injectables, implants, and IUDs). |
| **Cost per commodity** | Country specific averages, based on Adding it Up, to account for differences in prices paid, brands, and durations (for injectables, implants, and IUDs). |

# Public Sector Procurement Projections for 20 Countries

Provided by: Mindy Scibilia (CHAI), Alexis Heaton (JSI), Maggie Murphy (JSI)

## Data Collection and Vetting

Given that country quantification results may not be well disseminated and may not be harmonized across countries, the CHAI and JSI team determined that to provide estimates for the period of 2016-2020, they would first need to collect and harmonize existing country quantification reports and then make assumptions, as needed, to extend the results forward to 2020. The CHAI-JSI team gathered available country quantification reports/documentation and supply planning databases (PipeLine) in a central location. The CHAI-JSI team then created a Microsoft Excel database to collect and organize the data. The table below provides a summary of some of the key contextual data points collected for each country in the database. The data collected represents the public sector needs in 100% of the countries, but only includes the non-governmental organization (NGO) sector in 40% of the countries, and the social marketing organization (SMO) sector in 15% of the countries. The private sector needs are not included in the data used for this analysis.

The team reviewed the information available for each country and used the following inclusion criteria to determine which countries and programs could be included in the analysis without additional follow-up:

- Availability of at least two years of forecast consumption data, one of which needs to be 2016.
- Stock on hand information as of the date of the quantification and a summary of procurement quantities for the period of the country supply plan. The team preferred to use the stock on hand as of the end date of the country supply plan if available.
- Maximum and minimum inventory control system parameters for each program.

If an existing country report did not meet the above criteria, then the report was excluded from the analysis. If a country report included several programs, but the above data points were not available for all programs, then the analysis only includes those programs for which all data points are available. The above inclusion criteria allowed the team to use a consistent and focused approach to the analysis; however it is important to work to expand the number of countries that can be included in the future. In order to do so, the team recommends working with key stakeholders to communicate with country-level stakeholders around standardizing and harmonizing the data points that are included in quantification reports/documentation.

## Steps and Assumptions to Calculate Results

The team built a Microsoft Excel template to produce country-specific and aggregated results. The team used a four-step process to produce the final results of the analysis.

1. Forecast consumption (dispensed to user quantities): Use the existing country consumption forecast for each product to estimate the annual consumption through 2020. If the country did not forecast through 2020, then apply a linear trend to the existing forecast to estimate the annual consumption to 2020. For newly introduced products with large variations in annual consumption, products with exceptionally high percent growth over time, or for products with a negative consumption trend that was not anticipated to continue, the linear trend was adjusted to be a stable trend.

2. Determine the quantities of each product needed: Use the country procurement needs to estimate product-specific procurement volumes through 2020. If the country did not supply plan through 2020, the team created a supply plan from the date that the country supply plan ended (for example December 31, 2017) through December 31, 2020. The following country-specific parameters were used to supply plan forward: the consumption forecast, the stock on hand (actual or theoretical), and the maximum and minimum stock levels for each product.

3. Determine the cost of procurement for each product: Use the estimated procurement quantities, the USAID and UNFPA average unit cost for each product, and an estimated percentage of the cost for freight, to estimate the cost of procurement for each product. An average of the USAID and UNFPA unit costs for each product was used to harmonize the cost inputs and because these are the two major donors of contraceptives to the countries included in the analysis. The country-specific freight estimate was used when available and when not available an estimate of 12% was used as a default. Twelve percent freight cost is the mode for the countries for which we have this data point.

4. Determine the cost of supplies associated with each method: Use the estimated procurement quantities, the USAID and UNFPA average unit cost for each product, and the estimated cost of supplies required for provision of implants, IUDs, and injectables per the "Adding it Up"estimates from 2014.

5. Aggregate the country and program-specific results for an overall estimate for the group of countries: Aggregate the individual product consumption estimates, procurement quantities, and costs by method for all countries for the following methods: Implants, Injectables, IUDs, Emergency Contraceptive Pills, Female Condoms, Male Condoms, Oral Pills, Standard Days Method. Present cost outputs in three tables: Procurement-Commodity Costs, Procurement-Commodity and Freight Costs, Procurement-Commodity and Supplies Costs. Provide aggregated results for the group of 20 countries as well as results for the 11 Global Financing Facility (GFF) countries.

## Notes about Data Collection and Vetting Process

The team did not review the quantification reports to assess the quality of the methodology used or to validate the final results. The team used the final country forecast and procurement quantities, since the country's final agreed-upon forecast and procurement quantities represent what the country is planning to procure in the short term. In order to ensure that our analysis aligned as much as possible with the country-level estimates, the team only made adjustment/assumptions during the supply planning step of the process if needed to complete this step (step 2 above). A thorough assessment and review of the methodology used by each country and validation of the results would require more long-term support to country stakeholders involved in the quantification process.

## Challenges with Using Country Quantification Report Data

There are several challenges with using this type of data to create consistent results across countries. The key challenges are:

- Lack of consistency in the format and information included in the quantification reports/documentation across countries.
- Types of data used for forecasting and the approach used to determine the final forecast were not always clearly detailed.
- Lack of clarity in the quantification report/documentation on what sectors are included in the public sector forecast, especially for countries where the NGOs are being heavily supplied by the public sector warehouses.
- Differences across countries in the number of years their consumption forecast covers and the number of years for which they created a supply plan. It is recommended that each country forecast consumption and supply plan for the next 24 months, but countries may have specific requirements/needs given internal budgeting cycles and program planning calendars.
- As stated above, the primary purpose of this exercise was to project procurement needs using country quantification results and not to validate how countries determined their procurement needs; however it was observed that some countries are not consistently following forecasting and supply planning best practices.

## Key Considerations when Interpreting the Results

The estimates derived from the country quantification reports provide a reasonably good estimate of the funding that will be needed to procure family planning products for these 20 countries for the next four years at current consumption trends; however there are several caveats to consider.

- The results of the analysis are reflective of a specific point in time and are not meant to be interpreted as exact figures. The results represent an estimate of the procurement volumes and costs based on the most recent information available for each country; however countries are and should regularly update their consumption forecast and supply plans.
- The primary purpose of the country quantification process is to determine the procurement needs in the next 12-24 month period, and supply plans for a longer period are not intended to be used for procurement. The actual country-specific procurement needs through 2020 could change significantly based on actual consumption, new program plans that change forecast assumptions, changes in user preferences, introduction of new products, changes to inventory control parameters, procurement gaps in 2015/2016 leading to larger quantities needing to be procured in 2017 to fill the supply pipeline, etc.
- The cost estimates are based on an average UNFPA and USAID unit cost for each product and an estimate of freight costs was consistently added to each country. At the country-level, countries may be using different unit costs and may not be consistently taking into account freight costs in their cost estimates. Therefore, even though we used the actual commodity procurement estimates from country reports when available, our cost assumptions may not align exactly with the assumptions made in each country.

For the above reasons, the results are presented in country groups and not at the individual country level. Our recommendation is to consult the relevant in-country stakeholders as needed to get detailed country-specific procurement estimates.

# List of 135 LMI Countries

| | | | |
|---|---|---|---|
| Albania | El Salvador | Malawi* | Sierra Leone* |
| Algeria | Equatorial Guinea | Malaysia | Solomon Islands* |
| Angola | Eritrea* | Maldives | Somalia* |
| Armenia | Ethiopia* | Mali* | South Africa |
| Azerbaijan | Fiji | Marshall Islands | South Sudan* |
| Bangladesh* | Gabon | Mauritania* | Sri Lanka* |
| Belarus | Gambia* | Mauritius | St. Lucia |
| Belize | Georgia | Mexico | St. Vincent & Grenadines |
| Benin* | Ghana* | Moldova | Sudan* |
| Bhutan* | Grenada | Mongolia* | Suriname |
| Bolivia* | Guatemala | Montenegro | Swaziland |
| Bosnia & Herzegovina | Guinea* | Morocco | Syria |
| Botswana | Guinea-Bissau* | Mozambique* | Tajikistan* |
| Brazil | Guyana | Myanmar* | Tanzania* |
| Bulgaria | Haiti* | Namibia | Thailand |
| Burkina Faso* | Honduras* | Nepal* | Timor-Leste* |
| Burundi* | India* | Nicaragua* | Togo* |
| Cabo Verde | Indonesia* | Niger* | Tonga |
| Cambodia* | Iran | Nigeria* | Tunisia |
| Cameroon* | Iraq* | Pakistan* | Turkey |
| Central African Republic* | Jamaica | Palau | Turkmenistan |
| Chad* | Jordan | Palestine, State of* | Tuvalu |
| Colombia | Kazakhstan | Panama | Uganda* |
| Comoros* | Kenya* | Papua New Guinea* | Ukraine |
| Congo* | Kiribati | Paraguay | Uzbekistan* |
| Congo, DR* | Korea PKR* | Peru | Vanuatu |
| Costa Rica | Kyrgyzstan* | Philippines* | Venezuela |
| Côte d'Ivoire* | Lao PDR* | Romania | Vietnam* |
| Cuba | Lebanon | Russian Federation | Western Sahara* |
| Djibouti* | Lesotho* | Rwanda* | Yemen* |
| Dominica | Liberia* | Samoa | Zambia* |
| Dominican Republic | Libya | São Tomé & Principe* | Zimbabwe* |
| Ecuador | Macedonia | Senegal* | |
| Egypt* | Madagascar* | Serbia | *69 FP2020 Focus Countries |

# Endnotes

1. See www.familyplanning2020.org for more information. FP2020 had 93 commitments as of November 2016.
2. See www.Track20.org for more information.
3. The Family Planning Estimation Tool (FPET) was designed to produce annual estimates of the contraceptive prevalence rate (CPR) and other indicators using statistical modeling that incorporates survey data and service statistics. For more information, see Technical Brief: Family Planning Estimation Tool at https//goo.gl/OKOim2.
4. United Nations, Department of Economic and Social Affairs, Population Division (2016). Model-Based Estimates and Projections of Family Planning Indictors 2016. New York: United Nations.
5. Jacqueline E. Darroch, Singh S., Weissman E. Adding it Up: The Costs and Benefits of Investing in Sexual and Reproductive Health in 2014 – Estimation Methodology. Guttmacher Institute, 2016.
6. See www.UNFPA.org for more information.
7. See www.NIDI.nl for more information.
8. See www.AvenirHealth.org for more information.
9. See www.ClintonHealthAccess.org for more information.
10. See www.JSI.com for more information.
11. All figures have been rounded to the nearest hundred-thousandth. Percentages may not add up to 100 due to rounding.
12. 135 countries categorized as low-income or middle-income by the World Bank as of July 2016. China, which the World Bank categorizes as middle-income, is not included in the scope of our analysis. The 135 LMI countries are shown on page # of this report.
13. The 69 FP2020 focus countries are shown on page 88 of this report.
14. The 20 countries included in the procurement analysis are Bangladesh, Burkina Faso, Cameroon, Cote d'Ivoire, Democratic Republic of Congo, Ethiopia, Ghana, Kenya, Lao PDR, Liberia, Malawi, Mauritania, Mozambique, Niger, Nigeria, Rwanda, Senegal, Tanzania, Togo, and Uganda.
15. Spending on contraceptive supplies in the year 2014 purchased the quantities that individual users consumed as well as additional quantities procured by institutional purchasers to keep public sector supply pipelines at optimal stock levels. Spending figures exclude the cost of freight.
16. Demographic and Health Surveys (DHS)
17. Multiple Indicator Cluster surveys (MICs)
18. See www.PMA2020.org for more information.

**19.** FP2020's goal calls for 120 million additional users of contraception by the year 2020, compared to the number of users in 2012. 2012 is the year the London Summit on Family Planning, which launched the FP2020 initiative, took place.

**20.** See methodology on page 81

**21.** Jacqueline E. Darroch, Singh S., Weissman E. Adding it Up: The Costs and Benefits of Investing in Sexual and Reproductive Health in 2014. Guttmacher Institute, 2016

**22.** The figures $322 million and $541 million (for the 135 LMI countries) and $233 million and $437 million (for the 69 FP2020 focus countries) are the projected funding shortfalls for the year 2020 alone.

**23.** For more information on the InSupply Project, visit http://insupply.jsi.com.

**24.** The FP2020 goal is to increase the number of users of contraception by 120 million in the year 2020 (compared to the number of users of contraception in 2012) across 69 focus countries.

**25.** United Nations, Department of Economic and Social Affairs, Population Division (2016). World Contraceptive Use 2016 (POP/DB/CP/Rev2016).

**26.** United Nations, Department of Economic and Social Affairs, Population Division (2015). World Population Prospects: The 2015 Revision, Data Booklet. ST/ESA/SER.A/377

**27.** United Nations, Department of Economic and Social Affairs, Population Division (2016). Estimates and Projections of the Number of Women Aged 15-49 Who Are Married or in a Union: 2016 Revision. New York: United Nations.

**The Reproductive Health Supplies Coalition**

The Coalition is a global partnership of public, private, and non-governmental organizations dedicated to ensuring that everyone in low- and middle-income countries can access and use affordable, high-quality supplies for their better reproductive health. It brings together agencies and groups with critical roles in providing contraceptives and other reproductive health supplies. These include multilateral and bilateral organizations, private foundations, governments, civil society, and private sector representatives.

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