A Planning and Advocacy Tool for Strengthening Family Planning Programs: Version 3

User’s Guide
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**ACRONYMS AND ABBREVIATIONS**

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<thead>
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<th>Acronym</th>
<th>Definition</th>
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<tbody>
<tr>
<td>CDC</td>
<td>U.S. Centers for Disease Control and Prevention</td>
</tr>
<tr>
<td>CPR</td>
<td>contraceptive prevalence rate</td>
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<tr>
<td>CYP</td>
<td>couple-years of protection</td>
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<tr>
<td>DHS</td>
<td>Demographic and Health Survey</td>
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<tr>
<td>FP</td>
<td>family planning</td>
</tr>
<tr>
<td>IUD</td>
<td>intrauterine device</td>
</tr>
<tr>
<td>LA/PMs</td>
<td>long-acting and permanent methods of contraception</td>
</tr>
<tr>
<td>MICS</td>
<td>Multiple Indicator Cluster Survey</td>
</tr>
<tr>
<td>MWRA</td>
<td>married women of reproductive age</td>
</tr>
<tr>
<td>RCP</td>
<td>Reality Check project</td>
</tr>
<tr>
<td>RCS</td>
<td>Reality Check scenario</td>
</tr>
<tr>
<td>RHS</td>
<td>Reproductive Health Survey</td>
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<tr>
<td>SDM</td>
<td>standard days method</td>
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<tr>
<td>UN</td>
<td>United Nations</td>
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<tr>
<td>UNFPA</td>
<td>United Nations Population Fund</td>
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<tr>
<td>USAID</td>
<td>U.S. Agency for International Development</td>
</tr>
<tr>
<td>WRA</td>
<td>women of reproductive age</td>
</tr>
</tbody>
</table>
ACKNOWLEDGMENTS

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The original version of Reality Check was developed under the ACQUIRE Project by John M. Pile, Alyson Smith, Robert Patton, and Jan Kumar, with input from John Ross. Emily Sonneveldt and Laura Subramanian provided valuable input for Version 2.
I. WHAT IS REALITY CHECK AND WHAT CAN IT DO FOR YOU?
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INTRODUCTION

Quality data are critical for advocating for funding to meet family planning (FP) program needs, setting program goals, and identifying the human and material resources necessary to meet those goals. Projecting contraceptive use is essential for setting realistic yet ambitious FP service goals and planning for the resources a program will require in the future. Sound programming requires data, so that the goals and activities selected are appropriate and evidence-based. But FP program designers, managers, and implementers are often not equipped with the data or tools needed to make realistic programming decisions.

Reality Check is an easy-to-use tool that generates data for evidence-based advocacy and strategic planning in FP programs. The tool can be used to set realistic FP goals and plan for service expansion to meet them; it can also provide data for advocacy by estimating program requirements for implementation, along with the health impact of achieving contraceptive goals. The tool enables users (a) to quickly test future goal scenarios, including changes in the method mix, and (b) to compare those future scenarios with past performance to determine whether current goals are feasible. Reality Check can be used at any geographic level for which population and contraceptive prevalence rate (CPR) data can be defined; it is most easily applied at the national and subnational levels, for which CPR data from population-based surveys are widely available, but it can also be used at lower levels if CPR can be estimated. Further, the tool can help managers better understand the potential costs and benefits of expanding the method mix to ensure that clients have access to a range of methods, so they can choose those that best meet their reproductive intentions.

The tool was also designed to be used on Windows computers in low-resource settings, where high-speed internet connections may not be available and computer skills may be low. Anyone with basic computer skills will be able to use the tool. Beneficiaries of the tool could include planners and administrators from ministries of health and other key agencies at the national, provincial, or district levels, as well as FP programmers at donor agencies or cooperating agencies.

This User’s Guide provides instructions for using the tool and explains the methodology and key concepts behind the tool. The complete Reality Check package consists of the tool itself, the User’s Guide, and a flash drive containing an electronic version of the guide, the tool, and additional resources, including electronic copies of the resources used for this guide.
BACKGROUND

Reality Check is a tool that generates data for evidence-based advocacy and planning. It can be used to set realistic FP goals, plan for service expansion to meet program objectives, and generate data for FP advocacy. Reality Check allows users to test future CPR goal scenarios, considering the implications of past CPR trends.

WHAT IS REALITY CHECK AND WHAT CAN IT DO FOR YOU?

Reality Check generates data for decision making; it allows one to assess past CPR trends and test future scenarios for a geographic area. The tool uses demographic data to project the number of contraceptive users over a set time period; based on that information, it can calculate the number of adopters (new users), commodity and supply needs and costs, service delivery capacity, and couple-years of protection (CYP) provided. A user can test and assess whether established goals are reasonable for a particular context, given the human or financial resources available. The tool was designed with the end user in mind, making it easy to generate data for decision making. The tool can be used nationally and subnationally in the health care system and is designed to be used in diverse settings, particularly in low-resource settings. A key feature of the tool is that it enables users to quickly test multiple “what if” scenarios. It can help managers better understand the costs of continuing to rely on a particular method, as well as the potential benefits of expanding method mix to promote the use of more effective contraception.

PROJECTING CPR GOALS AND PLANNING REALISTICALLY

Quantifying overall CPR and method-specific goals is essential to advocating for investment in FP, evaluating current FP program efforts, and planning realistically for the resources the program will require. But program managers often are not equipped with the figures or tools needed to make realistic programming decisions. Sound programming requires data, so that the goals and activities selected are appropriate and evidence-based. Projecting CPR is both an art and a science, and it is important to note that the quality of the projections (output) is closely tied to the quality of the data entered (input) and to the validity of the assumptions made. To generate reliable projections, you should have good knowledge of the FP program and be aware of aspects that may change and affect contraceptive demand or use.

NEED FOR LOCAL, CONTEXT-SPECIFIC PROJECTIONS

There is a real value to projecting FP needs at subnational levels, to improve programming processes and FP program results. Often, a given country may have significant regional differences in FP usage, differences that should be reflected in both program design and resource allocation. Reality Check can project CPR and user, commodity and supply, and service needs at the national, regional, and district levels.

1 A CYP is the amount of contraception necessary to protect one couple from pregnancy for one year; the calculation of CYPs is based upon the volume of all contraceptives sold or distributed to clients during that year.
I. WHAT IS REALITY CHECK AND WHAT CAN IT DO FOR YOU?

**Reality Check: It’s Not about Targets, It’s about Planning**

Informed and voluntary decision making is a pillar of quality FP services. Clients’ right to freely choose requires that they are not pressured or coerced to accept FP or to use a particular method. It also implies the availability of a range of methods from which the client can choose without constraint. For clients to exercise this right, they need accurate information that they can understand, access to trained health care professionals with good communication and counseling skills, and a social context that supports them in making decisions that meet their fertility and reproductive health needs.

Reality Check is a planning tool to help policymakers and managers understand what is realistic within the limits of existing resources, to estimate the potential impact of FP, and to project the resources needed to serve estimated numbers of FP clients at future points in time, based on what is known about the population and the goal.

The results should be used to project resource requirements and to advocate for and deploy them, but not to set individual targets for health service providers. Not only would this compromise the quality of services, it would also violate the terms and conditions of USAID funding, as stipulated in the Tiahrt Amendment (USAID, 2009). This U.S. law prohibits the use of any numerical targets or quotas of total numbers of births, of FP acceptors, or of acceptors of a particular FP method (though it permits use of quantitative estimates or indicators for budgeting or planning purposes). The Tiahrt Amendment applies to any U.S. nongovernmental organizations, foreign nongovernmental organizations, public international organizations, or foreign governments receiving funds, technical assistance, commodities, or training from any U.S. government account for FP activities.

**Sample Questions That Reality Check Can Help Answer:**

- If past contraceptive prevalence trends continue, what CPR would we achieve in 2020?
- The Ministry of Health has set a goal of 30% modern method prevalence by 2020. Is this achievable? What human and material resources will be required to meet this goal?
- If unmet need for FP is high, what will be required to meet that need?

**USES OF REALITY CHECK**

Reality Check helps you plan based on informed estimates of need, by examining the relationship of contraceptive prevalence to contraceptive users, adopters, implant removals, commodities, commodity and supply costs, and service delivery capacity, based on the number of women of reproductive age (WRA) or married women of reproductive age (MWRA) in a given geographic area. Reality Check can also generate estimates of reproductive health outcomes (unintended pregnancies, abortions, unsafe abortions, live births) that could be averted if the target method mix and CPR were to be achieved.
I. WHAT IS REALITY CHECK AND WHAT CAN IT DO FOR YOU?

The outputs that Reality Check can project are:

<table>
<thead>
<tr>
<th>Planning</th>
<th>Advocacy</th>
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<tr>
<td>CPR</td>
<td>CYP</td>
</tr>
<tr>
<td>Number of users</td>
<td>Unintended pregnancies averted</td>
</tr>
<tr>
<td>Number of adopters</td>
<td>Abortions averted</td>
</tr>
<tr>
<td>Number of implant removals(^2)</td>
<td>Unsafe abortions averted</td>
</tr>
<tr>
<td>Commodities</td>
<td>Live births averted</td>
</tr>
<tr>
<td>Costs(^3)</td>
<td>Maternal deaths averted</td>
</tr>
<tr>
<td>Service provision</td>
<td></td>
</tr>
</tbody>
</table>

\(^2\) IUD removals are not estimated due to the relative ease of the IUD removal procedure, as opposed to the implant removal procedure.

\(^3\) Only contraceptive costs are included as default values in Reality Check, but users can enter per-unit total service costs, if available, to calculate the total costs of providing services.
II. USING REALITY CHECK
TECHNICAL REQUIREMENTS

SYSTEM REQUIREMENTS
The following are the minimum system requirements for running the latest version of Reality Check. Please note that if your system does not meet these requirements, you will not be able to install the application.

Reality Check is a Windows desktop application that has been designed for and specifically tested with the following Operating Systems:

- Windows XP SP3
- Windows Vista
- Windows 7
- Windows 8
- Windows 8.1

The total disk space (including prerequisites, which are primarily included in Windows Updates) is approximately 145 MB. This includes:

- 40 MB—Reality Check application
- 85 MB—.NET 4.0 Client Profile (included with typical Windows Updates)
- 20 MB—SQL Compact Framework 4.0 SP1

A PDF Reader, such as Adobe Reader (free), is required to open and read the User's Guide. This can be downloaded from http://get.adobe.com/reader/.

INSTALLATION

Installation via the web:
1. Open a web browser and visit http://www.respond-project.org/realitycheck/.
2. Click the [Install] button
3. The application will automatically check to confirm that the prerequisites are installed.
   a. If the prerequisites are already installed, the application will automatically install without any further interaction.
   b. If the .NET 4.0 Client Profile has not already been installed, the application will prompt you to first confirm download and then install this prerequisite before proceeding with installation of the Reality Check application. Click [Accept] to proceed with the installation.
   c. If SQL Server Compact 4.0 SP1 has not already been installed, the application will prompt you to first confirm download and then install this prerequisite before proceeding with the installation. Click [Accept] to proceed.
Installation via CD-ROM, DVD, or flash drive
1. Insert the medium (CD-ROM, DVD, or flash drive), and Windows will automatically
open the medium to browse its contents in Windows Explorer.


3. The application will automatically check to confirm that the prerequisites are installed.
   a. If the prerequisites are already installed, the application will automatically install
      Reality Check without any further interaction.
   b. If the .NET 4.0 Client Profile has not already been installed, the application will
      prompt you to first install this prerequisite before proceeding with installation of the
      Reality Check application. Click Accept to proceed with the installation.
   c. If SQL Server Compact 4.0 SP1 has not already been installed, the application will
      prompt you to first install this prerequisite before proceeding with installation. Click
      Accept to proceed.

As noted, the Microsoft .NET 4.0 Client Profile is part of Windows Updates. If you keep
your computer up to date with Windows Update, this prerequisite will already be installed.

UNINSTALLING REALITY CHECK
Reality Check can be uninstalled in the following manner:

• Windows XP
  1. Click on Start > Click on Control Panel > Double-Click on Add or Remove
     Programs.
  2. In the Currently Installed Programs box, click on Reality Check, then click on
     Remove.
  3. If you are prompted to confirm the removal of the program, click Yes.

• Windows Vista, Windows 7
  1. Click on Start > Click on Control Panel > Click on Programs and Features.
  2. In the Currently Installed Programs box, click on Reality Check, then click on
     Remove.
  3. If you are prompted to “Restore the application to its previous state” or “Remove the
     application from this computer,” select Remove the application from this computer,
     then click OK to proceed.
II. USING REALITY CHECK

GENERAL ORIENTATION

Reality Check consists of a Start-Up Screen and a Main Application Screen, which in turn consists of a Scenario Configuration Panel and a Scenario Display Output Panel.

GENERAL TERMS

- **Scenario** — A Scenario is a specific configuration of Data, Goals, and Display. There can be multiple scenarios in a Reality Check Project.
- **Project** — A Project embodies all open scenarios.
- **Configurable Section** — There are three configurable sections in each Scenario that define the final outputs; these sections are Data, Goals, and Display.
- **Adorner** — Adorners are notification icons (e.g., !) that appear when there are issues with configurations. Hover over these icons to learn about the issue, and how to resolve it.
- **Help** buttons — Help buttons are notification icons (e.g., ?) that appear when a particular section is selected. Hover over these icons to learn more about this section.

GENERAL FEATURES

- **Save** — Reality Check allows you to save scenarios and projects into a proprietary file format. The files will be saved with extension .RCS (for a Scenario) and .RCP (for a Project) in the location of your choice. To open previously saved scenarios or projects, open the Reality Check tool, then choose either “Open Scenario” or “Open Project” to choose the previously saved Scenario/Project.
- **Open** — Reality Check allows you to open sessions that have been previously saved. You may open .RCS files (opens a single previously saved Scenario) or .RCP files (opens a previously saved Project containing one or more scenarios).
- **Print** — Reality Check allows you to print the outputs in graph and/or table format. To use this feature, a printer must be installed on your PC.
- **OK** buttons — When an **OK** button is available, clicking it in any area of the application will save any changes made to the configurations.
- **Cancel** buttons — When a **Cancel** button is available, clicking it in any area of the application will cancel any changes made to the current configurations.
- **Advanced Configuration [..]** buttons — When available, the **Advanced Configuration** buttons next to a configurable option allow the user to override default settings.
START-UP SCREEN
This screen provides an overview of the Reality Check application and links to key options. The information and options included in the start-up screen include:

- Version—The version number is shown just below the Reality Check logo.
- Do not show this screen next time—By selecting this checkbox, and then clicking the **Get Started!** button, you will bypass the Start-Up Screen on subsequent start-up of the Reality Check application.
- **Get Started!**—By clicking the **Get Started!** button, you will be brought onto the main Reality Check application screen.
- Open the User’s Guide—By clicking this button, you will open the User’s Guide.
- Language Options—You may select one of the available language options (English or French) here. The application will remember your language option, and it will default to it the next time you use Reality Check.

MAIN REALITY CHECK APPLICATION SCREEN
This screen provides the core functionality for the Reality Check application. Here, users can create and configure unique scenarios, which include Data settings, Goals to achieve, and Display outputs, as well as a host of other options available in the main drop-down menu bar at the top. The options in the main menu include:

**File**
- **New Scenario**—Create a new scenario in your Project.
- Open Scenario—Load a saved scenario file (.rcs) into your current Project.
- Open Project—Load a saved Project file (.rcp) into your Project.
- Save Scenario—Save the active Scenario to a file (.rcs).
- Save Project—Save the current Project (all scenarios) to a file (.rcp).
- Export Table to Excel—Export the data table in the Scenario Display Output to an Excel file.
- Export Chart to PNG—Export the chart in the Scenario Display Output to a PNG file.
- Print—Send the chart and data table in the Scenario Display Output to your printer.
- Exit—Exit the application.

**Options**
- Language—Change the language used in the application.
Help

- View Start-Up Screen — Open the Start-Up screen.

SCENARIO CONFIGURATION PANEL

The Scenario Configuration Panel is located below the Scenario Tabs, docked to the left side of the application. This section is used to configure the active Scenario. When the application first loads, the first Scenario is created automatically, with the default name of “Scenario 1”.

The Scenario Configuration Panel consists of three configurable sections, described in the below sections.

SCENARIO DISPLAY OUTPUT PANEL

The Scenario Display Output Panel is the workspace to the right of the Scenario Configuration Panel. This area is used to display the active tab’s projections in graph and/or data table formats.

When the application first loads, the Scenario Display Output Panel will default to a “Waiting for Information” message. It will continue to display this message until 1) the Data Configuration section is configured, 2) at least one goal in the Goals Configuration section is selected, and 3) a Display Output is selected in the Display Configuration section. Please see the sections below for details on these steps.

The Scenario Display Output Panel can be expanded by hiding the Scenario Configuration Panel via the Hide Input Panel arrow at the top left-hand corner of the Output Panel.

OVERVIEW

The three main steps in using Reality Check are the three screens displayed via the Scenario Configuration Panel.

1. **Data**: In this screen, you will define the CPR and population data to be used in the projections.

2. **Goals**: Here, you will select between one and four potential future CPR goals to explore, adjusting the contraceptive method mix if desired.

3. **Display**: In this last screen, you will choose planning and advocacy data outputs to display in graph and/or table format.

Each step is described in further detail on the following pages.
DATA

The Data Configuration section allows users to define and configure the underlying data sources that are used when generating projections. It comprises the following options:

**SCENARIO NAME**
Create a unique name for your Scenario. This name will be displayed in the title of the graph for all outputs.

**COUNTRY**
Reality Check includes default data for all countries with Demographic and Health Survey (DHS) and/or Multiple Indicator Cluster Survey (MICS) data. Select the country for which you are running projections from the drop-down menu. If the country of interest does not appear in the list, choose the **Other Country** option. However, you will be required to enter CPR and population data for the country of interest.

**LEVEL**
Select the level (National, Regional, or District) for which the projections will be run in the selected country. No additional data entry is required if you choose the National option. However, both the Regional and District options will require additional data entry.
II. USING REALITY CHECK

Regional

If Regional is selected, the “Region” list will be displayed below; this list contains all of the regions in the country for which default data are available. From the drop-down menu, choose the region of interest.

% Population in Region

No data input is required if you wish to create a projection for all WRA at the national level. However, if you wish to create a projection at the subnational level, you will need an estimate of the percentage of the national population that resides in your area of interest; no default data for this percentage are included. This information can be found in the most recent census report for the country of interest; simply divide the population of the region or district of interest by the national population to find the percentage of the national population that resides in the area of interest.

District

If District is selected, you will be required to enter custom CPR data, as no district-specific CPR data are available.

You will also be required to specify the percentage of the national population residing in the district of interest (see the description of this step under “% Population in Region”).

WRA GROUP

If your projection is for married women, default country-specific data from the most recent DHS provide the percentage of women of reproductive age who are currently married or in union.

MWRA Percentage

When MWRA is selected under “WRA Group”, a data entry field called “% of women who are married” will be displayed below. This box displays the default value for the percentage of women of reproductive age who are married or in union, which is needed to estimate the population of MWRA. This default value, which comes from the most recent DHS, can be changed as desired.

CPR DATA SOURCE

CPR data drive all of the other calculations in the tool. You can choose to use the CPR values for your country or region of interest that are already included in the tool, or you can enter CPR values from another source and/or modify the values provided.
II. USING REALITY CHECK

Included Data
If you would like to simply use the CPR values included in the tool, select Included Data. CPR data included in the tool come from the DHS, MICS, or Reproductive Health Survey (RHS). All CPR figures have been rounded to the second decimal place.

When the CPR Data Source is set to Included Data, the View CPR Data button will be visible below. Clicking on this button will open the View Included CPR Values pop-up window, which will show all included CPR values, including the survey year, in a table. The column at the far right, Average Annual Rate of Increase or Decrease, shows the average annual rate of change in CPR for each method, based on historical trends.

Injectable and Implant Allocations
Survey reports include only the total CPR for injectables and implants and do not specify the CPR for each type of injectable (one-, two-, or three-month) or implant (Jadelle, Sino-implant (II), or Implanon). However, it is important to specify the exact types of injectable and implant in use, as variations in cost, effectiveness, and duration of use exist.

By default, 100% of injectable users are assumed to use Depo-Provera (the three-month injectable), and Jadelle is assumed to be used by 100% of implant users. However, if these methods are not available in your country and/or if multiple types of injectable and/or

4 The classification of LAM as a modern or traditional method, which can vary by country and by survey, is consistent with the classification in the original survey.
5 Note that the MICS data included in the tool include only data for MWRA at the national level in selected countries in Asia and Africa.
implant are available in your country, you should specify the percentage of users who use each type under Injectables Allocation and/or Implant Allocation. This breakdown could be estimated from consumption data by calculating the percentage of all implants purchased that comprise Jadelle, Implanon, and Sino-implant (II) and entering the respective percentages in the Allocation boxes.

The allocations that you enter must sum to exactly 100% in the row at the bottom. The application will alert you if the Total Allocation is greater or less than 100% and will require you to correct the allocation before clicking OK to proceed.

**No. of Data Points**
If you choose to use the default CPR data included in the tool, you will need to specify the number of past trend data points to use in projecting the continuation of past trends. To project a continuation of the past trend, the average annual increase or decrease is calculated and applied. If you chose only two data points in the Data screen, this is simply the difference between the first CPR and the second CPR, divided by the number of years between them. If you choose to use 3–5 data points, a line of best fit will be generated, and the slope of that line will be used as the annual rate of increase. Keep in mind that the farther into the future you project, the less reliable your numbers will become.

When examining the past annual rate of increase or decrease and considering its implications on future goals, you may want to consider issues such as:

- In terms of international experience, relatively strong FP programs can experience a 1.5% annual increase in CPR; how does your program compare with this number?
- What factors contributed to these changes within the health care system and in an external environment?
- Have there been shifts in commitment at various policy levels, toward or away from FP in general or specific methods? Are any shifts expected?
- What are the resources allocated to FP?
- What were the FP priorities during the years between surveys?
- Are myths and rumors about a particular method contributing to possible decreases or stagnation in utilization?
- Might communication campaigns or community activities have contributed to an increase in method utilization?
- Has use been limited by contraceptive stock-outs?
- Have new FP methods been introduced into your program?

**Custom Data**
If you would like to enter CPR values from another source, or revise the values included in the tool, choose the Custom Data option. If CPR Data Source is set to Custom Data, the Edit CPR Data button will be visible just below. Clicking on this button will open the Custom CPR pop-up window, which includes a data point grid, with included data for the
country or region autopopulated. Each column contains the CPR data from existing DHS and/or MICS sources and has a CLEAR button above it; clicking on this will clear all values in that column, effectively deleting the data point. You may enter CPR data from another source for up to five data points, then click OK to proceed.

**Important Note concerning Both the Included Data and Custom Data Options**

Note that the summary totals for Any Method or Any Modern Method calculated in the tool may differ from those included in DHS, RHS, or MICS reports. This is due to the fact that Reality Check includes only default values for the methods listed above; other methods that may be included in survey reports will have to be entered as “other” if they are of interest. Small differences between the summary totals in the tool and those in survey reports may also be attributable to rounding.

Ensure that you use CPR data corresponding to the level of projection you would like to run (i.e., CPR figures for WRA or for MWRA).

**POPULATION PROJECTIONS**

The projected population of WRA or MWRA is a critical component in calculating all outputs in the tool. Most countries’ populations are increasing, which will affect those outputs.
You have two options for calculating the population:

1. **United Nations (UN) Projections**
   This feature uses UN population data from 2012, included as default data in the tool, to calculate the population of women in the country you select.\(^6\)\(^7\) No data entry is required if you select this option, and you can click on View UN Population Data to view the default population data that are included in the tool. Data are presented by age-group and by year, with a column for the total population of women aged 15–49 at the end; the data in this summary column are those used for the calculations in the tool.

![UN Population Data](image)

2. **Census Data**
   If you prefer to use population data from a national census report, choose the Census Data option. If you have age- and sex-specific population data for one year in your geographic area of interest (i.e., a recent census that provides data for your region or district), as well as an estimated growth rate, this feature can calculate an estimate of the population of WRA or MWRA for your years of interest. Essential information for your custom population data that you must specify includes:

1. **Year of Census**: Enter the year of the census.
2. **WRA Population**: Enter age- and sex-specific population data for your region of interest for one year within your target age-range. In general, you will want the number of

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\(^6\) Population data used in Reality Check were provided with the permission of the United Nations Population Division. Source: United Nations, 2013.

\(^7\) Data on the percentage of women of reproductive age who are married or in union are obtained from the most recent DHS for each country.
women between the ages of 15 and 49 or the number of married women between 15 and 49. While this information can often be found in the latest national census report, it may not be broken down into age-groups by sex, particularly if it is from a preliminary or summary census report. If this is the case, it may be simplest to calculate the percentage of the national population residing in your area of interest (by dividing the population of the area by the total national population).

3. **Growth Rate**: Enter the estimated annual population growth rate; this information is often found in census reports.

## GOALS

The Goals Configuration section allows you to define and configure the underlying goals to test. Testing various CPR goals creates projections that can inform programmatic decisions. For example, the data can help guide your decision-making process on factors such as resource utilization, future contraceptive needs, provider capacity needed to meet projected service estimates, and demand-side interventions needed to address barriers to contraceptive uptake.

Essential information for your future goals that you must specify includes:

1. **Future Goal Year**: Select the end year for your projections.
2. **Run Goals For**: Select whether your goals will be based on All Methods, including traditional methods, or only on Modern Methods.

### FUTURE GOAL SCENARIO OPTIONS

Under **Select goals**, place a tick mark by clicking in the box next to each goal for which you would like to run projections. Four future goal options are available, including:

- **Maintain current CPR**
  The first possible future goal scenario is simply to maintain the current CPR for each method, from the most recent DHS or MICS, through your future goal year. No data entry is required for this option.
II. USING REALITY CHECK

**Meet current unmet need**

This scenario allows you to test a future CPR goal of meeting the current unmet need for FP.

The current percentage of WRA or MWRA (depending on your selection in the Goals screen) can be viewed or modified via the Advanced Configuration Button [Meet Current Unmet Need [...]] . Clicking on this button will open the [Meet Current Unmet Need] pop-up window, allowing you to view or change the default Unmet Need for the selected data configuration. Throughout Reality Check, these Advanced Configuration Buttons allow you to view and/or modify the data used in calculations for specific outputs.

**Achieve total CPR of X**

For this option, you can specify a CPR goal for a future year. For example, your country, region, or district may have an established CPR goal or may be in the process of considering a certain goal. The data entry box to the right allows you to define the total CPR being considered for your Future Goal Year. Keep in mind that, depending on the resources required to achieve the total CPR goal, you may need to return to this page to revise the goal if it is unrealistic.

**Increase total CPR annually by X%**

This textbox allows you to define the projected rate at which CPR will increase each year until the Future Goal Year is reached.

Keep in mind that, historically, strong FP programs have typically been able to increase CPR by approximately 1.5 percentage points annually. Since an annual increase of 1.5 percentage points indicates a strong program, an increase projected to exceed 1.5 points annually may not be reasonable, and goals may not be achievable if they are initially set too high. Assessing what an achievable annual gain may be for your context requires thinking about factors such as past performance, FP resource allocation, service delivery capacity (current and any planned expansion), and trends of FP programs in settings similar to yours.

**Method mix**

For future goal options 2–4 (Meet Current Unmet Need, Achieve Total CPR of X, and Increase Total CPR Annually by X%), it is important to consider the desired method mix, or the percentages of all FP users using each type of method. For example, if a large proportion of current FP users rely on one method, or if a new method will be introduced, you may
need to consider potential changes in the method mix. In Reality Check, you can examine scenarios in which you achieve a CPR goal while the method mix remains constant, or you can test the implications of achieving changes in the method mix.

1. **Hold method mix constant**
   You might want to test a future scenario in which overall CPR increases while the current method mix remains constant. Based on the current CPR for each method and the percentage increase in total CPR that you would like to see, this function will generate a future CPR for each method, while holding each method’s share of the method mix constant.

2. **Revise method mix**
   You may also want to test scenarios in which each method comprises a certain percentage of the method mix. This function allows you to look at the current method-mix breakdown and indicate the percentage of the method mix that you would like each method to comprise. The tool then generates a future CPR for each method and allows you to compare the current CPR and method mix with your target CPR and mix.
DISPLAY

The Display Configuration screen allows you to define and configure the projection display outputs. It comprises the following options:

**SHOW ME**

Reality Check can project figures for a number of methods:

- Female sterilization
- Male sterilization
- Pill (oral contraceptives)
- Intrauterine device (IUD)
- Injectable (one-month, two-month, or three-month)
- Implant (Norplant®, Jadelle, Implanon, or Sino-implant (II))
- Male condom
- Female condom
- Standard days method (also known as SDM or CycleBeads)
- Any traditional or folk methods
- Two “other” methods of your choice (Reality Check does not provide default data for these categories; if other methods are of interest, you will have to enter all data.)

Reality Check also calculates summary totals for three categories:

- **Any method**: sum of all of the methods listed above
- **Any modern method**: sum of all methods excluding Any Traditional or Folk
- **All long-acting and permanent methods of contraception (LA/PMs)**: sum of implant, IUD, female sterilization, and male sterilization
Under the Show Me menu, select whether you would like to view the outputs for a single method/summary total, or whether you would like to display the outputs for each method individually. The options include:

**Projections for a Single Method**
Select this to show both a graph and data table output displaying projections for a single contraceptive method or for a summary total.

**Projections for All Methods**
This option will display the outputs for each method individually. When this option is selected, no graph will be included in the display outputs in the Scenario Display Output Panel; this is because, due to differences in scale for outputs for different methods, and with multiple future goal scenarios selected, the graph would be very cluttered and difficult to interpret. Instead, the data table will be displayed, filling the entire panel, and will include all contraceptive method projections for each goal selected, in tabular format. It may be helpful to first view the summary total (Any Modern Method or Any Method, depending on your future goal), then view the outputs for each method via this option.

**METHOD TO STUDY**
If Projections for a Single Method is selected, the Method to Study menu will be visible, allowing you to choose the contraceptive method to display in their projections. From this drop-down menu, choose the method or summary total you wish to include in the Scenario Display Output Panel.

**PLANNING DISPLAY OUTPUTS/ADVOCACY DISPLAY OUTPUTS**
Use the check boxes below Planning Display Outputs and Advocacy Display Outputs to select which output you would like to display in the Scenario Display Output Panel. Outputs, and the methodology behind those outputs, are described in detail in the Outputs section below.

**EXCLUDE CONTINUATION OF PAST TRENDS IN OUTPUT**
Selecting this option will hide the “Continue Past Rate of CPR” goal in the display outputs. By default, this goal is enabled, as it is important to consider the projection of past trends when testing future CPR goals. This option is placed here, in the Display Configuration section as opposed to the Goals Configuration section, because you are encouraged to consider the past trends by default.

If the current CPR for a method is already high and the annual increase was also high, a past trend continuation can produce an impossibly high level of use (even to up to 100% of women). Not only may the projection for total CPR rise too high, it may also do so for the subtotals for modern methods and for LA/PMs. Likewise, a significant decline for a particular
method may produce a projected CPR of zero within a few years. Therefore, you must inspect each method’s projection to decide how likely it is and analyze the outcomes accordingly.

Note that the CPR of any given method cannot go below zero, even if a sharply negative trend is occurring; it also cannot exceed 100%, even if a sharp increase is projected. Such a sharp increase or decrease would suggest that early trends cannot continue at the same annual rate.

**SCENARIO DISPLAY OUTPUT PANEL**

Once you have configured your future goal(s) to display, outputs will automatically display in graph and table formats in the Scenario Display Output Panel.

**Graphs**

The legend for the graph is displayed at the top right corner of the Display Output Panel. The graphs show the projections; they show the trends and may help expose data inputs or assumptions that are incorrect. For example, if you see sharp increases or decreases in the lines (versus a steady trend), you may need to question how realistic or achievable those increases or decreases will be in the future.

You can export graphs to a PNG file by choosing **Export Chart to PNG** from the File menu, and you can also print graphs by choosing **Print** from the **File** menu.

Graphs can be customized by clicking on the Advance Configuration Button **Customize Graph [...]**, which allows you to configure the graph display settings. The following options are available:

- **Change Marker Style**: For each Scenario selected, you can define the shape of the data marker on the graph, along with the color of the marker and connector lines.
II. USING REALITY CHECK

- **Hide All Points**: Selecting this option will show the projections strictly as lines—no data point marker will be displayed.
- **Include Data Labels**: Selecting this option will show actual data point values on the graph, above the data markers.
- **Hide Legend**: Selecting this option will hide the legend at the top of the graph.

**Tables**

Tables are automatically displayed below the graph. You can export tables to an Excel file by choosing **Export Table to Excel** from the File menu, and you can also print data tables by choosing **Print** from the File menu.

Clicking on the Advanced Configuration Button **Customize Table [...]** allows you to configure display settings for the data table. The following options are available:

- **Shade Alternate Rows**: Selecting this option will shade every other row in the data table as light gray.
- **Match Text Colors to Chart Colors**: Selecting this option will set the font color for each scenario in the data table to its corresponding color as set in the Customize Graph Advanced Configuration pop-up.
- **Show Years Down**: Selecting this option will invert the default display of the data table.

**OUTPUTS AND METHODOLOGY**

Each output can be displayed by clicking the checkbox next to the output name. Take note of the Advanced Configuration Buttons next to certain outputs; these buttons allow you to view and/or modify the data required for each calculation. Due to wide variations in scale, only one output may be selected for display at a time. However, you can use the Export Table to Excel feature, under the File menu, to export outputs to an Excel file, in which you can create your own graphs.

Outputs are categorized into those for planning and those for advocacy, described in detail on the following pages.
PLANNING DISPLAY OUTPUTS AND METHODOLOGY

CPR
The first data output in Reality Check is the projected CPR trajectory for each selected goal. The projected continuation of the past trend will also be displayed unless you select the Exclude Past Trend Continuation option.

Always verify that you are using the correct numbers. If your projection is to be based on MWRA, ensure that you have chosen the CPR for MWRA and not for all WRA. If you choose the “Custom CPR” option, it is also critical to double-check all of your entered data for accuracy. Even small inaccuracies will result in faulty projections.

NUMBER OF USERS
Calculating the number of users by method helps to quantify and illustrate the implications of CPR increases. The calculation for the number of users applies the CPR to the population of WRA or MWRA as defined in the Data screen. All outputs in Reality Check are derived from the output for the number of users.

The formula for calculating the number of users is:

\[
\text{MWRA} \times \frac{\text{CPR}}{100} \text{ or } \text{WRA} \times \frac{\text{CPR}}{100}
\]

In Reality Check, the number of users for each method is calculated, then is summed to the totals for All Methods, Any Modern Method, and All LA/PMs.

NUMBER OF ADOPTERS (NEW USERS)

We have seen how the number of projected users is calculated, but to actually attain a given number of users in any one year, we have to account for various factors.

New adopters are needed each year for three reasons:
1. To replace those who discontinued since the previous year (as well as sterilization users who pass age 49)
2. To allow for the rise in the CPR
3. To allow for increases in the population of WRA or MWRA
These three sources of adopters (new users) produce the projected increase in users for the next year. The tool shows the growth in users needed from one year to the next due to the CPR rise and population growth, and the number of adopters needed is this increase plus an allowance for discontinuation from the previous year.

Thus, the formula for calculating the number of adopters in a given year is:

\[
\text{(Number of users in the current year – number of users in the previous year)} + \text{(Number of users in the previous year * discontinuation rate)}
\]

Calculations for adopters and for all outputs below begin with the first year projected (baseline plus one). That is because they are based on the difference between users from one year to the next.

If a current user switches to a new method, she is considered an adopter (new user) for that method. For example, if a woman has used injectables for a decade but has an IUD inserted this year, she is an adopter (new user) of the IUD (and a discontinuer of injectables).

**DISCONTINUATION**

Discontinuation rates impact the programmatic decisions you make. Discontinuation will always be a factor with contraceptive methods, for a range of reasons: People may not be satisfied with their method; the partner may not like the method; people may lack access to a method; a couple may want to have another child; a couple may switch to another method; or the user may no longer need contraceptive protection. However, health service providers can reduce discontinuation by taking such measures as offering thorough counseling, so that clients know what to expect from their method. It is important for
programmers to assess why clients discontinue their method, so the reasons can be addressed accordingly.

Discontinuation rates are calculated here by estimating the percentage of all users who cease use in a 12-month period. Average international rates are included as default values in the tool. These rates are based on the following factors:

- Discontinuation rates for resupply methods (the pill, injectable, and condoms) consist of the percentage of users who stop relying on a method over a one-year period. These figures are derived from secondary analyses of the DHS.

- For the IUD, implant, and SDM, the discontinuation rate is estimated by calculating the reciprocal of the mean duration of use (RESPOND Project, 2011), which is also linked to the CYP factor. Current estimates indicate that IUD users employ the method for approximately 4.6 years; dividing 1 by 4.6 produces the percentage of users who drop out per year. Implant discontinuation is calculated in the same way as for the IUD. Estimates for five-year implants indicate that women use them for approximately 3.5 years (again, the duration of use is linked to the CYP factor). Dividing 1 by 3.5 produces the percentage of users who drop out.

- Women do not discontinue using sterilization; rather, discontinuation rates refer to the percentage of users who age out of the reproductive cycle after age 49. International estimates indicate that a user relies on sterilization for approximately 10 years before aging out; thus, a default discontinuation rate of 10% for sterilization users is included.

**Relationship between Users, Adopters, and Discontinuers**

The relationship between users, adopters, and discontinuers is simple but can be confusing. Consider the following analogy:

- If we fill a bucket with water, we can consider all of the water in the bucket to be our users; these are all of the individuals who use a method.

- The percentage of the bucket that is filled with water represents our CPR; to achieve a higher CPR, we need to add water to the bucket (increase our number of users).

- However, our bucket has a small hole through which water leaks out; all of the water that spills out represents our discontinuers. These are individuals who stop using a particular method, for any reason.

- To increase our CPR (or just to maintain it, because of discontinuation), we need to add more water to the bucket. The water that is added represents our adopters—the individuals who begin to use a method within a given year.

If we were to reduce the amount of water that left the bucket through the leak (i.e., reducing the discontinuation rate), we would need to add less water to compensate for the leak (i.e., we would need to add fewer adopters).
IMPLANT REMOVALS

For most contraceptive methods, discontinuation simply means that the client stopped using the method on his or her own; a client stops taking the pill, for example, or does not return for more injections. However, for the implant and the IUD, a woman who wishes to discontinue use must return to a health facility to have the device removed by a health professional. For all types of implants, it is important to know how many clients will return to have their device removed each year. With this information, decision makers can plan and provide for provider training and supply needs.

By applying the annual discontinuation rates to the number of users for each implant type, we can estimate the number of clients who will want removals for each type of implant each year.8

To calculate implant removals, we simply apply the discontinuation rate to the number of users, for an estimate of the number of users who will discontinue in the year.

The formula for calculating removals is:

\[
\text{Number of users} \times \text{Discontinuation rate}
\]

CONTRACEPTIVES AND SUPPLIES

Contraceptives and supplies for LA/PMs are simply equal to the number of adopters in any given year. Contraceptive and supply needs for SDM, the IUD, the implant, female sterilization, and male sterilization are all calculated in this way.

Contraceptive and supply needs for resupply methods are calculated differently, in that such calculations are based upon the numbers of users. Thus, it is important for your program to account for wastage, due especially to the fact that pills and condoms may be received by a client but not used. (This is not done for the injectable, since it acts for three full months once received.) Pill users are typically handed three cycles at a time, and with high discontinuation rates, many of these pill cycles are never used. The same is true of condom supplies given to adopters and users.

- Pill commodity needs are estimated by calculating that a user will require approximately 15 cycles per year. Therefore, the number of users in a given year is multiplied by 15.
- Condom commodity needs are calculated by multiplying the number of users in a given year by 120 (the international estimate for the number a condom user will utilize annually).
- Injectable (three-month) commodity needs are calculated by multiplying the number of users in a given year by four (the number of injections a user will need annually).

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8 Reality Check does not estimate the annual number of removals for the IUD, given the method’s potential long-term use (10 or more years), compared with the potentially shorter use of implants (five years or less).
II. USING REALITY CHECK

DISPLAYING CONTRACEPTIVE AND COST OUTPUTS

When Contraceptives and Supplies or Contraceptive Cost are selected as the Display Output, a graph will not be available. Thus, the data table will expand to the full height of the Scenario Display Output Panel.

COSTS

Utilizing contraceptive and supply data, you can project how much commodities will cost, or if you have more comprehensive data on the total per-user cost of providing a service, you can project the total cost to your program to provide the services. This is crucial to adequately plan and advocate for the resources needed for FP.

The contraceptive costs for all methods are linked directly to the projected commodity requirements for that year. The formula for calculating costs is:

\[
\text{No. of commodities} \times \text{per-unit commodity cost}
\]

International average per-unit commodity and supply costs in U.S. dollars are included as defaults in Reality Check. However, you can input local cost estimates for each method. The costs provided are costs for commodities only; they do not include additional service delivery and distribution expenses, such as personnel salaries or transport costs to deliver the commodities. These are also only estimates based on averages. To capture additional costs, such as shipping or wastage, you could mark up these costs by a certain percentage, based on your local program estimates.

The following web sites can also be useful sources for current per-unit commodity costs:


You could also estimate the total service cost (labor, supplies, overhead, etc.) by changing the default values to the per-unit cost of providing each service.

Costing resources include:

- UNFPA’s Reproductive Health Costing Tool, which can be requested at: www.unfpa.org/public/site/global/lang/en/pid/3595#costing

The commodity costs are fixed costs and do not account for inflation.
CASELOAD

As you have gone through the process of calculating your past trend and projecting that trend, you have probably thought about the current service delivery capacity of your program. It is difficult to fully capture client load for resupply methods, due to factors such as discontinuation and community access to pills and condoms. The estimates for LA/PMs are much more reliable, due to the fact that these are provider-dependent methods; therefore, clients will have to visit service delivery sites to access the methods.

For this section, no default values for the number of facilities are provided; you must input current figures for the estimated number of sites able to provide service. With this information, Reality Check will estimate the average number of clients served in each facility each month, by method.

**Short-acting (resupply) methods**

The formula for calculating the number of clients per month per site for resupply methods is:

\[
\frac{\text{(Number of users} \times \text{number of visits per year)}}{\text{(Number of sites able to provide service)}} = \frac{12}{12}
\]

Given that pills and condoms may be available through community distribution points such as pharmacies, it is up to you as to how you want to use this field. If X numbers of community health workers provide condoms in your geographic region of interest, for example, X could be the number of condom sites, as each worker is essentially operating as a service site. Given that LA/PMs are provider-dependent and that clients have to access those methods at the site level, to be consistent, you may want to solely focus on site-level distribution here (versus trying to account for community-level distribution as well).

**LA/PMs and SDM**

Because LA/PMs and SDM (also known as CycleBeads) do not require resupply visits, the client load for these methods is calculated by using the number of adopters in a given year instead of the number of users. The formula for these methods is:

\[
\frac{\text{(Number of adopters} \times \text{number of visits per year)}}{\text{(number of sites able to provide service)}} = \frac{12}{12}
\]

Because the estimated client load figures for LA/PMs are linked to adopters, and because adopters are visiting a site for one insertion or procedure (which is provider-dependent), these estimates will be more accurate than the estimates for short-acting methods.

When looking at the data for service provision, it is again important to think about issues that have been mentioned previously, such as the number of service sites or trained providers, etc. The existing and expected service capacity may not be sufficient to provide for the projected client load; therefore, more resources and interventions may be required to increase the capacity to provide those services. Questions these data might raise include:

- Is it feasible to offer implant services to more clients?
- What is the best schedule for implant services—daily, or perhaps only once a week?
II. USING REALITY CHECK

ADVOCACY DISPLAY OUTPUTS AND METHODOLOGY

COUPLE-YEARS OF PROTECTION

Reality Check estimates CYP based on the outputs for commodities. While CYP for resupply methods is calculated by dividing the commodities by the CYP factor, CYP for LA/PMs and for SDM is calculated by multiplying commodities by the CYP factor; this is because one commodity (such as one IUD insertion) provides longer protection for a client than the resupply methods.

For short-acting methods, the formula for calculating CYP is:

\[
\text{Number of commodities} / \text{CYP factor}
\]

For LA/PMs as well as SDM, the formula is:

\[
\text{Number of commodities} \times \text{CYP factor}
\]

UNINTENDED PREGNANCIES AVERTED

When calculating the number of unintended pregnancies averted, consider not only the proportion of women who would have become pregnant if they had not been using their current FP method, but also the percentage of users who will experience a method failure resulting in an unintended pregnancy.

Therefore, the number of unintended pregnancies averted for each method is calculated as:

\[
\left( \text{Number of users} \times \text{Pregnancy rate} \right) - \left( \text{Number of users} \times \text{Method-specific failure rate} \right)
\]

The pregnancy rate refers to the proportion of women of reproductive age who, if not using a FP method, would become pregnant in a given year. The method-specific failure rates, from Trussell (2011) (male and female sterilization, implant) and Cleland et al. (2006) (IUD, injectable, pill, condom, traditional methods), indicate the percentage of users of each method who will experience a method failure (become pregnant) in a given year; the default values in the tool assume typical rather than perfect use. A default pregnancy rate of 310 per 1,000 sexually active, nonfecund women who do not want to become pregnant is included in the tool (STEP UP, 2014).

This calculation assumes that:

- All users are sexually active.
- If not using their current method, users would not be using another method.
- Any pregnancies incurred by current contraceptive users would be unintended.

\[\text{Cleland et al.’s data come from women in developing countries, while Trussell’s data come from women in the United States; when available, data from Cleland et al. are used.}\]
ABORTIONS AVERTED

When faced with an unintended pregnancy, many women will seek an abortion, even in contexts in which the procedure is not available under safe and/or legal circumstances. Preventing unintended pregnancies through FP also prevents abortions.

To calculate the number of abortions averted due to FP, Reality Check includes a region-specific abortion ratio. The abortion ratio refers to the known percentage of unintended pregnancies that result in induced abortion (as opposed to the abortion rate, which refers to the estimated number of abortions per 1,000 women). Measurement of abortion is difficult, since it is often performed under illegal circumstances and may be a cause of embarrassment to survey respondents.

The number of abortions averted is calculated as:

\[
\text{Abortion ratio} = \frac{\text{Number of unintended pregnancies averted}}{\% \text{ of unintended pregnancies ending in an abortion}}
\]

Note that the default abortion ratios included in the tool estimate the percentage of unintended pregnancies that end in abortion, which is significantly higher than the percentage of all pregnancies that end in abortion.

UNSAFE ABORTIONS AVERTED

Not all induced abortions are performed under unsafe conditions.

The number of unsafe abortions averted is calculated via the following formula:

\[
\text{Unsafe abortions averted} = \text{Abortion ratio} \times \left( \frac{\% \text{ of abortions that are unsafe}}{100} \right)
\]

LIVE BIRTHS AVERTED

To estimate the number of live births averted, we need to consider the number of unintended pregnancies averted, then apply the percentage of unintended pregnancies that would have resulted in a birth. From that total number of births, we subtract the number that would have ended in a stillbirth to estimate the number of live births averted.

The number of live births averted is calculated via the following formula:

\[
\text{Live births averted} = \left( \frac{\text{Number of unintended pregnancies averted}}{\% \text{ of unintended pregnancies ending in a birth}} \right) - \left( \frac{\text{Number of unintended pregnancies averted}}{\% \text{ of unintended pregnancies ending in a birth}} \right) \times \left( \frac{\text{Stillbirth rate}}{1,000} \right)
\]
MATERNAL DEATHS AVERTED
To calculate the number of maternal deaths averted via FP, we apply the country-specific maternal mortality ratio (deaths per 100,000 live births) to the number of live births.

The number of maternal deaths averted is calculated as:

\[
\text{Number of live births averted} \times \left(\frac{\text{Maternal mortality ratio}}{100,000}\right)
\]

ADDING A NEW SCENARIO
The Scenario Tabs are located just below the Main Menu and above the Scenario Configuration Panel (docked to the left of the application) and Scenario Display Output Panel (docked to the right of the application).

You may add a new scenario within the same Reality Check Project by clicking on the tab with the plus \( + \) icon. When multiple Scenarios are created, the “Active” scenario is denoted by a white tab with a light green stripe on top. “Inactive” scenarios are denoted by light-gray tabs, with a dark green stripe on top.

When multiple scenarios are created, a Combined View tab will be available, to the far right of the Scenario Tabs section. Selecting this tab gives you the ability to create a single graph and/or data table comparing outputs from the different open Scenarios.

COMPARING OUTPUTS FROM DIFFERENT SCENARIOS
COMBINED VIEW CONFIGURATION PANEL
When two or more scenarios are open, the Combined View tab will be displayed at the far-right of the Scenario Tabs section. Clicking on this tab will open the Combined View Configuration section in the Scenario Configuration Panel (see opposite page). This section consists of the following options:

- **Select Goal** — Select the Goal your projections for the selected Scenarios will be based on.
- **Select Output** — Select the Display output that your projections for the selected Scenarios will be based on.
- **Method to Study** — Select a single method to display, or select one of the summary options.
- **Start Year/End Year** — Define the year range for your projections.
II. USING REALITY CHECK

- **Select Scenarios**—Use the check boxes to select the scenarios to display in the Scenario Display Output Panel; all open scenarios will be displayed.

![Combined View](image)

- **Select Goal:** Continue Past Rate of CPR
- **Select Output:** Users
- **Method To Study:** Any Modern Method
- **Show Projections from:**
  - **Start Year:** 2015
  - **End Year:** 2034
- **Select Scenarios:**
  - Uganda Future Goal
  - Kenya Meets Unmet Need
- **Customize Graph**
- **Customize Table**
BIBLIOGRAPHY


**ADDITIONAL RESOURCES**

Several other tools can be used as complements to Reality Check. These include the FamPlan module of Spectrum, which was developed by the Policy Project (Futures Group International); CastCost, developed by the U.S. Centers for Disease Control and Prevention (CDC); the Impact2 Calculator, developed by Marie Stopes International; and PipeLine, developed by the USAID|DELIVER Project (John Snow Inc.). Full descriptions as well as information about additional tools that can be used for planning and advocacy in FP programs can be found in:

APPENDIX 1: DEFINITIONS, ACRONYMS, AND FORMULAS

ABORTION RATIO
The number of induced abortions per 100 unintended pregnancies. In Reality Check, this ratio is used to calculate the number of induced abortions averted by a particular FP scenario, using the following formula:

\[
\text{Number of unintended pregnancies averted} \times \left( \frac{\text{abortion ratio}}{100} \right)
\]

ADOPTER
Adopters (also known as new users) are all of the people who begin using a method in any given year. The formula for calculating the number of adopters in a given year in Reality Check is:

\[
\left( \text{Number of users in the current year} - \text{number of users in the previous year} \right) + \left( \text{Number of users in the previous year} \times \text{discontinuation rate} \right)
\]

Even if an individual has been using a method and switches to another method, s/he will be considered an adopter of that method in the year in which s/he begins to use it.

CENSUS
A complete population count taken by a national census bureau every 10 years. A census details the age and sex structure of a national population and various subpopulations, providing figures for women of reproductive age (WRA) and married women of reproductive age (MWRA) or percentage in union (FPLM, 2000).

COMMODITIES AND SUPPLIES
The supplies (pill packs, injections, IUDs, surgical equipment, etc.) needed to provide contraceptive protection for one year.

CONTRACEPTIVE PREVALENCE RATE (CPR)
The percentage of women of reproductive age who are using (or whose partner is using) a contraceptive method at a particular point in time, almost always reported for women married or in a sexual union. Generally, CPR includes all contraceptive methods (modern and traditional), but it may include modern methods only (MEASURE Evaluation Population and Reproductive Health, 2013). This information can generally be found through population-based surveys such as the Demographic and Health Survey (DHS) or the Multiple Indicator Cluster Survey (MICS).
COUPLE-YEARS OF PROTECTION (CYP)
The amount of contraception necessary to protect one couple from pregnancy for one year, based upon the volume of all contraceptives sold or distributed to clients during that year. It is calculated by multiplying the quantity of each method distributed to clients by a factor representing the number of units needed to protect a couple for one year, to yield an estimate of the duration of contraceptive protection provided per unit of that method. The calculation takes into account that some methods, like condoms and oral contraceptives, may be used incorrectly and then discarded, or that IUDs and implants may be removed before their lifespan is realized (RESPOND Project, 2011). CYP is generally used to assess program progress, not to plan for service delivery.

DISCONTINUATION RATE
The cumulative probability that acceptors of a contraceptive method will discontinue using the method after a specified period of time (e.g., one year). It is the inverse of the continuation rate (MEASURE Evaluation Population and Reproductive Health, 2013).

DEMOGRAPHIC AND HEALTH SURVEY (DHS)
An ongoing program of nationally representative household surveys that provide data on a wide range of monitoring and impact evaluation indicators in the areas of population, health, and nutrition. These surveys are implemented by The DHS Project and collaborating organizations (Measure DHS, no date). Data from the DHS can be found in the DHS reports at www.measuredhs.com/or at www.statcompiler.com/.

FAILURE RATE
The percentage of women experiencing an unintended pregnancy during the first year of use of a particular contraceptive method. The failure rate is the inverse of the effectiveness rate. Data are available for typical use and perfect use of contraception (Trussell, 2011).

LONG-ACTING AND PERMANENT METHODS (LA/PMS)
Contraceptive methods that provide the longest duration of protection—the hormonal implant and the IUD (both long-acting methods), and male sterilization (vasectomy) and female sterilization (both permanent methods).

MATERNAL MORTALITY RATIO
The number of maternal deaths per 100,000 live births. In Reality Check, this ratio is used to calculate the number of maternal deaths averted, using the following formula:

\[
\text{Number of live births averted} = \text{Number of live births} \times \text{maternal mortality ratio}
\]
METHOD MIX
The mix of contraceptive methods used by the population, expressed as the percentage that each method constitutes out of all contraceptives used (FPLM, 2000). If, for example, a particular method is used by 5% of women, and the CPR for the population of interest is 30%, then that method comprises 16.7% of the total method mix (5/30).

MODERN METHODS OF CONTRACEPTION
Condoms, injectables, implants, IUDs, oral contraceptives and other hormonal methods, vaginal methods (spermicides, diaphragms, or caps), the standard days method, and male or female sterilization.

MARRIED WOMEN OF REPRODUCTIVE AGE (MWRA)
Women aged 15–49 who either are formally married or live with a male sexual partner (consensual unions). MWRA is often used as an estimate of the percentage of women of reproductive age (WRA) who are potentially at risk of pregnancy (FPLM, 2000). (This measure is also known as “currently married women.”)

POPULATION GROWTH RATE
Annual rate of population growth, measured as births minus deaths plus migration, or the more commonly available rate of natural increase, which is simply births minus deaths. These rates measure the growth of an entire population and may differ somewhat from the rate of growth for WRA (FPLM, 2000).

PREGNANCY RATE
The percentage of sexually active, fecund women of reproductive age who will become pregnant in a given year if not using contraception (STEP UP, 2014). In Reality Check, this rate is used to calculate the number of unintended pregnancies averted, using the following formula:

\[
\frac{\text{Number of users} \times \text{pregnancy rate}}{\text{Number of users} \times \text{method-specific failure rate}}
\]

STANDARD DAYS METHOD (SDM)
A method in which a woman keeps track of estimated high- and low-fertility points during her menstrual cycle, often using a product called CycleBeads (Lundgren et al., 2012).
STILLBIRTH
Late fetal deaths weighing at least 1,000 grams or occurring at or beyond 28 weeks gestation (Cousens et al., 2011).

TRADITIONAL METHODS OF CONTRACEPTION
Nonsupply methods, such as periodic and postpartum abstinence, total abstinence if for contraceptive reasons, withdrawal, douching, and folk methods (IPPF, [no date]).

UNMET NEED FOR CONTRACEPTION
The number or percentage of women currently married or in union who are fecund and who desire to either terminate or postpone childbearing, but who are not currently using a contraceptive method. The total number of women with an unmet need for FP consists of two groups of women: those with an unmet need for limiting (i.e., who never want another birth), and those with an unmet need for spacing (i.e., who want another birth, but only after a certain period of time) (MEASURE Evaluation Population and Reproductive Health, 2013).

UNSAFE ABORTIONS
Termination of unintended pregnancy done either by people lacking the necessary skills or in an environment that does not conform to minimum medical standards, or both (Sedgh et al., 2012). In Reality Check, unsafe abortions are calculated as:

\[ \text{Abortions averted} \times (\% \text{ of abortions that are unsafe}/100) \]

USERS
The people using a particular contraceptive method in a given year (also known as clients). In Reality Check, numbers of users are calculated using the following formula:

\[ \text{contraceptive prevalence rate (CPR)} \times \frac{\text{number of women of reproductive age or of married women of reproductive age in the population}}{} \]

WOMEN OF REPRODUCTIVE AGE (WRA)
Number of women in their reproductive years (ages 15–49) (FPLM, 2000).
## APPENDIX 2: SOURCES OF DEFAULT DATA IN THE REALITY CHECK TOOL

<table>
<thead>
<tr>
<th>Data</th>
<th>Source(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Contraceptive prevalence rates</td>
<td>Demographic and Health Surveys (various)</td>
</tr>
<tr>
<td></td>
<td>Multiple Indicator Cluster Surveys (selected countries)</td>
</tr>
<tr>
<td>% of WRA who are married</td>
<td><a href="http://www.statcompiler.com">www.statcompiler.com</a></td>
</tr>
<tr>
<td>Discontinuation rates</td>
<td>Demographic and Health Surveys (various) (short-acting methods)</td>
</tr>
<tr>
<td></td>
<td>The RESPOND Project, 2011 (LA/PMs, SDM)</td>
</tr>
<tr>
<td>Commodity costs</td>
<td>Darroch &amp; Singh, 2011 (permanent methods)</td>
</tr>
<tr>
<td></td>
<td>UNFPA, 2014 (IUDs, short-acting methods, SDM)</td>
</tr>
<tr>
<td></td>
<td>Reproductive Health Supplies Coalition, 2013 (implants)</td>
</tr>
<tr>
<td>CYP factors</td>
<td>RESPOND Project, 2011</td>
</tr>
<tr>
<td>Contraceptive failure rates</td>
<td>Trussell. 2011 (male and female sterilization, implant)</td>
</tr>
<tr>
<td></td>
<td>Cleland et al., 2006 (IUD, injectable, pill, condom, traditional methods)</td>
</tr>
<tr>
<td>% of unintended pregnancies ending in an induced abortion</td>
<td>Darroch &amp; Singh, 2011</td>
</tr>
<tr>
<td>% of unintended pregnancies ending in a live birth</td>
<td>Darroch &amp; Singh, 2011</td>
</tr>
<tr>
<td>Stillbirth rates</td>
<td>Cousens et al., 2011</td>
</tr>
<tr>
<td>% of abortions that are unsafe</td>
<td>Sedgh et al., 2012</td>
</tr>
<tr>
<td>Unmet need</td>
<td>Demographic and Health Surveys (various)</td>
</tr>
</tbody>
</table>
APPENDIX 3: FREQUENTLY ASKED QUESTIONS

The following are the most commonly encountered Reality Check problems and their solutions. For additional support with or to share feedback on the tool, please feel free to contact The RESPOND Project at info@respondproject.org.

Question
Can I use Reality Check on my Apple computer?

Answer
Reality Check is a Windows application that can only be used on Windows computers. However, if you have the Parallels software on your Apple computer, you will be able to use Reality Check via that program.

Question
I made changes to the data inputs, but now I want to revert to the default values.

Answer
Any changes that you make to the data inputs will not modify the underlying database of default data. To revert to the default values, simply open a new Reality Check Scenario or Project.

Question
The Scenario Display Output Panel says “Waiting for Information.”

Answer
Ensure that you have made selections for the Country of interest (under Data), that you have chosen at least one future goal to test (under Goals), and that you have chosen one output to display (under Display).

Question
When I click on the Case Load box, no outputs are displayed.

Answer
Be sure that you have entered the number of facilities able to provide each method via the Advanced Configuration [...] button.
Question
The past trend continuation outputs for my projection are all zeroes.

Answer
Check the CPR data via the Data screen; if only one past CPR data point is available for your country, no past trend projection can be calculated.

Question
The CPR for the final year of my goal displayed on my table/graph does not match the future CPR goal I set in the Goals screen.

Answer
Verify that you have chosen the correct option under Show Me. If your goal is for all methods, ensure that you have chosen All Methods. If your goal is only for modern methods, choose Modern Methods.