

policy

August 2015

IMPACTNOW MANUAL

*Estimating the Health
and Economic Impacts
of Family Planning Use*

ImpactNow was created by the Health Policy Project (HPP), with support from USAID. It is available at no cost for use by anyone. All uses of ImpactNow should credit HPP, USAID, and Marie Stopes International as the source of the model, using the citation below. HPP does not verify the results of applications performed independently, and results should be presented as estimates.

HPP kindly requests that individuals, institutions, and programs using the model inform Futures Group of such use so that we better understand its reach and impact, by contacting policyinfo@futuresgroup.com. Users are also welcome to submit comments and suggestions to improve the model to the same address.

Suggested citation (ImpactNow Model): Health Policy Project, United States Agency for International Development (USAID), and Marie Stopes International. 2014. *ImpactNow Model*. Washington, DC: Futures Group, Health Policy Project.

Suggested citation (ImpactNow Manual): Health Policy Project, United States Agency for International Development (USAID), and Marie Stopes International. 2014. *ImpactNow Manual: Estimating the Health and Economic Impacts of Family Planning Use*. Washington, DC: Futures Group, Health Policy Project.

ISBN: 978-1-59560-060-8

The Health Policy Project is a five-year cooperative agreement funded by the U.S. Agency for International Development under Agreement No. AID-OAA-A-10-00067, beginning September 30, 2010. It is implemented by Futures Group, in collaboration with Plan International USA, Avenir Health (formerly Futures Institute), Partners in Population and Development, Africa Regional Office (PPD ARO), Population Reference Bureau (PRB), RTI International, and the White Ribbon Alliance for Safe Motherhood (WRA).

ImpactNow Manual

Estimating the Health and Economic Impacts of Family Planning Use

AUGUST 2015

Health Policy Project and Marie Stopes International

The information provided in this document is not official U.S. Government information and does not necessarily represent the views or positions of the U.S. Agency for International Development.

TABLE OF CONTENTS

Abbreviations	v
Introduction	1
Getting Started	2
Scenarios	2
Navigation.....	3
Configuration	5
Inputs	7
<i>Scenario names and default data</i>	7
<i>Inter-quartile plausibility range for the pregnancy rate of women with unmet need</i>	7
<i>Healthcare utilization pages</i>	8
Set policy goals	8
Outputs.....	9
<i>Indicator Analysis</i>	9
<i>Summary Tables</i>	9
<i>Scenario Comparison</i>	9
<i>Incremental Cost-Effectiveness Ratio</i>	10
Methodology	11
Overview	11
Women of reproductive age at risk for unintended pregnancy	12
Contraceptive prevalence rate.....	12
Unmet need	12
Users of family planning.....	13
Acceptors of long-acting and permanent methods.....	13
Pregnancies averted	16
Live births averted	18
Abortions averted (total and unsafe).....	19
Maternal deaths averted	19
Child deaths averted.....	21
DALYs averted	21
Family planning costs	22
Healthcare costs averted	22
Cost-benefit ratio	23
Incremental cost-effectiveness ratio.....	23
References	24
Exercise 1: Getting Started.....	25
Introduction.....	25
Saving and configuring	25
Task 1.1: Begin by double-clicking on the tool	25
Task 1.2: Save and name a new version of ImpactNow, identifying it as a practice file.....	26
Task 1.3: Enable macros to start using tool	27
Task 1.4: Choosing the country and range of years.....	28
Task 1.5: Choosing the population of interest	29
Task 1.6: Choosing the type of policy goal	29
Exercise 2: Modifying Inputs	31
Modifying select inputs from their default setting.....	31
Task 2.1: Navigate to the Inputs page.....	31

Task 2.2: Reviewing the input tabs.....	32
Task 2.3: Modifying inputs.....	33
<i>Sample A: Modifying “percent of women that are in union”</i>	33
<i>Sample B: Modifying “percent antenatal care received”</i>	34
Task 2.4: Applying input modifications to each policy scenario.....	35
Exercise 3: Setting Policy Goals	38
Objectives	38
Task 3.1: Navigating to the “Set Policy Goals” pages.....	38
Task 3.2: Entering new baseline figures	39
Task 3.3: Entering inputs into the main CPR policy goal.....	39
Task 3.4: Entering inputs into the “Method Mix” policy goal.....	40
Task 3.4: Navigating to page three of the Set Policy Goals section	43
Exercise 4: ImpactNow Output Analysis	44
Objectives	44
Task 4.1: Navigating to the Outputs pages	44
Task 4.2: Selecting, viewing, and interpreting output indicators of interest	45
Task 4.3: Viewing and copying/pasting summary table results.....	46
Task 4.4: Viewing and copying/pasting scenario comparison tables.....	49
Task 4.5: Navigating to, selecting, and interpreting the incremental cost-effectiveness ratio.....	52
Group Exercise	54
Narrative #1	54
Narrative #2	54

ABBREVIATIONS

CPR	contraceptive prevalence rate
DALY	disability-adjusted life year
FP	family planning
FP2020	Family Planning 2020
HPP	Health Policy Project
ICER	incremental cost-effectiveness ratio
IUD	intrauterine device
LAPM	long-acting and permanent method
MMR	maternal mortality ratio
MSI	Marie Stopes International
PBI	previous birth interval
USAID	United States Agency for International Development
WRA	women of reproductive age
YLD	years lost to disability
YLL	years of life lost

INTRODUCTION

ImpactNow is an Excel-based model that estimates the health and economic impacts of family planning (FP) in the near term. It is designed to model the impacts of different policy scenarios, and to compare the results of those scenarios in advocacy materials. It can help to estimate the impacts of many “what if” questions about policy options. ImpactNow is designed to analyze impacts in the two- to seven-year time horizon; for example, it could be used to estimate the impacts of meeting Family Planning 2020 (FP2020) commitments. The outcomes are focused on reproductive health metrics, as well as economic metrics, such as cost-benefit ratios and incremental cost-effectiveness ratios (ICER).

ImpactNow was adapted from Marie Stopes International’s (MSI) Impact 2 as a collaboration between MSI and the Health Policy Project (HPP), with support from USAID. While Impact 2 is more focused on estimating the effectiveness of the FP services provided by one institution, ImpactNow is more focused on the impacts from all national and regional-level providers. Further, the ImpactNow model is designed to be user-friendly with click-through navigation, default data, and automatic scenario comparison.

The Health Policy Project, supported by USAID, authored this user manual to help health analysts use the ImpactNow model to estimate the health and economic impacts of FP programs. The manual is divided into two main sections: “Getting Started” and “Methodology.” The Getting Started section is written as a quick-start guide on the navigation and flow of pages, and offers a brief explanation of each page of the model. Individual inputs and outputs are not explained in detail. The Methodology section serves as a reference for users who want more detail about the calculations and assumptions.

GETTING STARTED

Scenarios

The comparison of different scenarios is at the heart of ImpactNow. A scenario is defined by a full set of input data and assumptions about the future of various parameters. These scenarios are the framework used to answer many “What if?” questions about future FP policy and behavior.

For example, analysts might want to know, “What are the financial and economic benefits to switching to greater use of long-acting and permanent methods (LAPMs)?” Alternatively, they may ask, “What impact would reaching our FP2020 commitment have on women’s reproductive health in our country?”

Constructing and comparing different scenarios allows them to answer these questions.

ImpactNow is designed to compare three scenarios at once. In the calculations, the first scenario serves as a baseline against which the second and third scenarios are compared. Thus, the first scenario should be some type of business-as-usual, base case, or constant. It could be a scenario where all parameters are held constant into the future, or it could be a scenario where past trends are continued, uninterrupted, into the future. The second and third scenarios should represent specific policy goals or interventions. The first scenario serves as a counterfactual against which analysts can measure the incremental impacts of the second and third policy scenarios.

When you open the ImpactNow file, you will see a **Welcome** page that gives basic information about ImpactNow and the version number. * Click on the “Next” arrow to continue.

ImpactNow



Version 1.0 - 26 Sep 2014

About

ImpactNOW is a product of collaboration between Marie Stopes International (MSI) and Health Policy Project (HPP), with support from USAID. ImpactNOW is designed to analyze the health and economic impacts of family planning use in the near-term. It is designed to be used at the national or regional level, and the results are *estimates* to be used for advocacy related to family planning and reproductive health programs. Default data are provided for all inputs; the user may choose to use these default data or, alternately, to replace specific parameters with their own data as they see fit. ImpactNOW provides automated comparisons across two or three scenarios. Methodology is largely based on MSI's Impact 2 tool.



For more information contact:
policyinfo@futuresgroup.com

Note: you must enable macros to use the ImpactNOW Model

This version is a working beta. Please contact us to report any bug. Please do not distribute

* The ImpactNow file may be unlocked by copying “unlockFG” into your clipboard, and then clicking the “Next” arrow on the Welcome page. To lock the file again, copy “lockFG” into your clipboard and then click the “Next” arrow on the Welcome screen.

Navigation

You can navigate through the pages of ImpactNow in two ways: the navigation bar at the top of each page and the “Previous/Forward” arrows on the upper right of each page.

Along the top of each page is a navigation bar. This bar is visible on all pages in the model (other than the Welcome page) and allows you to go directly to any section (or page). Your current location is indicated by the button in dark blue.



The Previous/Forward arrows in the upper right of each page move you through each section, in sequential order.



The page sequence used by the Previous/Forward arrows follows the map of all pages in ImpactNow:

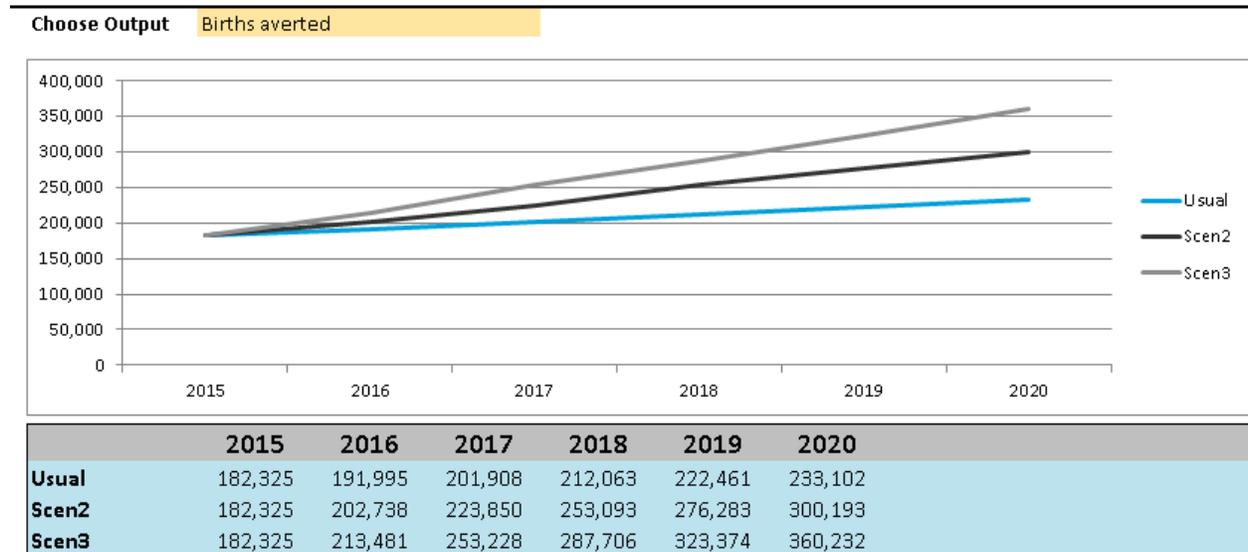
- Configuration
- Inputs
 - Business-as-usual Scenario
 - Health Indicators
 - Effectiveness of Contraceptives
 - Median Age of Use for Contraceptives
 - Healthcare Utilization per Pregnancy
 - Healthcare Utilization per Birth
 - Scenario 2
 - Health Indicators
 - Effectiveness of Contraceptives
 - Median Age of Use for Contraceptives
 - Healthcare Utilization per Pregnancy
 - Healthcare Utilization per Birth
 - Scenario 3
 - Health Indicators
 - Effectiveness of Contraceptives
 - Median Age of Use for Contraceptives
 - Healthcare Utilization per Pregnancy
 - Healthcare Utilization per Birth
- Set Policy Goals
 - CPR/Unmet Need/Future Budgets (depending on Configuration)
 - Method Mix
 - FP Costs
- Outputs
 - Indicator Analysis
 - Summary Tables

- Scenario Comparison
- Incremental Cost-Effectiveness Ratio

Throughout the model, all cells with values that you can change are shaded in yellow.

Country	Ghana
Start Year	2010
End Year	2019

Results are in light blue.



Configuration

The first page after the **Welcome** page is the **Configuration** page, where you will make some general decisions about your analysis. To the upper left is an arrow that takes you back to the **Welcome** page; the “Forward” arrow on the upper right can be used to guide you through the pages.



Get Started:

Configure

Country

Start Year

End Year

<p>Select which women you want to include in your analysis</p> <p><input checked="" type="radio"/> All women of reproductive age</p> <p><input type="radio"/> Only women in union of reproductive age</p>	<p>Select a policy goal to configure your outputs</p> <p><input checked="" type="radio"/> Set a Goal for CPR</p> <p><input type="radio"/> Set a Goal for Unmet Need</p> <p><input type="radio"/> Set a goal for Future Budgets</p>
---	--

First, you must choose the country and years of your analysis. These values can either be selected from the drop-down menu or typed in manually. The range of possible values for years is 2010 to 2020.

Country

Start Year

End Year

The next choice in the **Configuration** page is whether you will conduct your analysis considering all women ages 15–49, or only those women 15–49 who are in union. The group you choose will constitute the population potentially at risk for unintended pregnancy, and who may therefore benefit from FP use. Make your selection using the radio buttons.

Select which women you want to include in your analysis

- Only women in union of reproductive age
- All women of reproductive age

The final choice on the **Configuration** page is the type of policy goal you would like to model. There are three choices: “CPR” (contraceptive prevalence rate), “Unmet Need,” and “Future Budgets.” Select the option that corresponds to the type of goal whose impact you’d like to analyze, or the goal you’d like to promote in your advocacy messages.

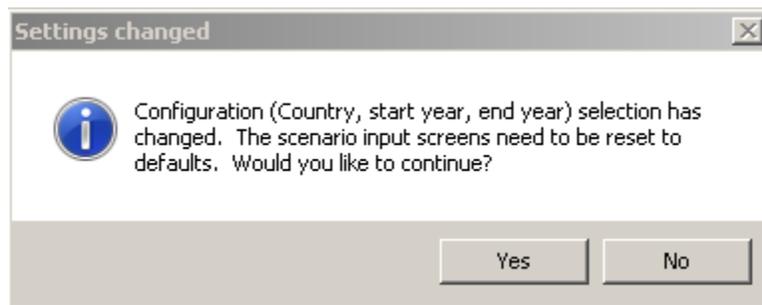
Select a policy goal to configure your outputs

Set a Goal for CPR

Set a Goal for Unmet Need

Set a goal for Future Budgets

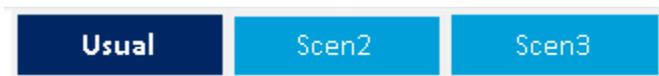
When you’ve finished configuring your analysis, you can move on to the **Inputs** page. If you’ve changed anything in the **Configuration** page, a dialog box will appear when you click away from it, asking if you would like to continue with your new selections.



This dialog box is a warning that the default data will be reset to align with your new selections. If you agree with this, click “Yes.” If you have inadvertently made changes on the **Configuration** page that you do not wish to implement, click “No.”

Inputs

Inputs are entered separately for each of the three scenarios. Within each scenario inputs are organized into five thematic categories. When in the **Inputs** page, there is a smaller navigation bar for the three scenarios under the main navigation bar. Like the larger navigation bar above it, the buttons on this bar can be used to move directly between scenarios. The dark blue button shows your current location.



Scenario names and default data

Near the top of the page under the “Health Indicator” heading is a place to name the scenario. You can enter any text into the yellow box. The name you give each scenario will automatically appear throughout the model. It is recommended that the first scenario represent some type of business-as-usual scenario that models what you might expect to happen in the absence of specific policy interventions. Such names could be “business-as-usual,” “base case,” or “constant,” depending on the assumptions you make. The names for the second and third scenarios may be shorthand for the policies or assumptions they model.

Just below the scenario name are buttons that can load inputs into the scenario. In the first scenario, there is only one button; this button loads the defaults for your country and years. (These defaults are already loaded when you leave the **Configuration** page; this button will reload them, overwriting any changes you have made to the defaults.) In the second scenario, there are two buttons: the first to “Load Default Data,” and the second to load the same inputs as the first scenario. In turn, the third scenario has three buttons: to “Load Default Data,” to load the inputs from the first scenario, and to load the inputs from the second scenario. Below is an example from the third scenario.



Each of the five input categories contains cells to enter the values of the parameters and to note the sources. Default values are provided for each parameter. When you have more specific or up-to-date data, or a trusted data source you prefer to use, you may replace any of the defaults. Be sure to note your source in the “Source” cell.

Inter-quartile plausibility range for the pregnancy rate of women with unmet need

When estimating the number of unintended pregnancies averted due to family planning, analysts must also estimate how many unintended pregnancies there would have been in the absence of FP use. Because ImpactNow analyzes FP users who wish to delay or avoid pregnancy, in the absence of family planning these women would have had an unmet need for it. The radio buttons for the “Inter-quartile plausibility range for the pregnancy rate of women with unmet need” allow you to choose an assumption about the annual pregnancy rate for women with unmet need. Estimates vary between 23 percent (the “Low” assumption) and 38 percent (the “High” assumption). Selecting the “Low” assumption will result in lower impacts. Selecting the “High” assumption will result in higher impacts. The default selection is the “Medium” assumption (31 percent).

If you maintain all other inputs and policy goals and differentiate between two scenarios only by selecting the Low assumption in one and the High assumption in another, the model will produce an inter-quartile plausibility range of estimated impacts. Such a range takes into account the uncertainty behind one of the key, yet difficult to observe, parameters of the model.

Inter-quartile plausibility range for the pregnancy rate of women with unmet need: Low (23%) Medium (31%) High (38%)

Healthcare utilization

The “Healthcare utilization per pregnancy” and “Healthcare utilization per birth” inputs are used to calculate the costs averted when an unintended pregnancy is averted. There are three components to this calculation: the percentage of pregnancies/births needing treatment; the percentage of those in need who receive the treatment; and the cost of the intervention. The radio buttons at the top of each table adjust the percentage of those in need of treatment and those who receive the treatment. When “Full Access” is selected, it is assumed that 100 percent of those in need of each treatment receive it. When “Actual Access” is selected, national or regional defaults for access to each intervention are read from the default database. Selecting “Full Access” will model a world where everyone who needs a specific treatment receives it, and will result in higher cost savings in the outputs. On the other hand, assuming “Actual Access,” where only a fraction of individuals who need a specific treatment receive it, models the current state of the healthcare system and will result in lower cost saving in the outputs.

Full Access
 Actual Access

Treatment	% of births requiring attention for:		Of the births that require attention, the % that are able to		Associated Costs for treatment of:	
	%	Comment	%	Comment	USD	Comment
Delivery Care	100%	Assumption	59%	RG/OneHealth 2	7.51	Assumption
Postpartum Care	100%	Assumption	12%	RG/OneHealth 2	0.79	Assumption

Set policy goals

There are three tabs in the Set Policy Goals section: the “Main Policy Goal,” the “Method Mix,” and the “FP Costs.” These are inputs that are more closely or frequently aligned with FP policy goals.

On the first tab, enter the CPR, Unmet Need, and/or Future Budgets. The inputs on this page depend on which policy goal was selected from the radio buttons on the Configuration page. Under some configurations, only the first year value is needed; under other configurations, you will also have to make an assumption about the last year value. Assumptions about values in the last year are often based on stated policy goals.

On the second tab, enter the base year method mix, as well as the final year method mix for each scenario. The method mix for each year should add up to 100 percent.

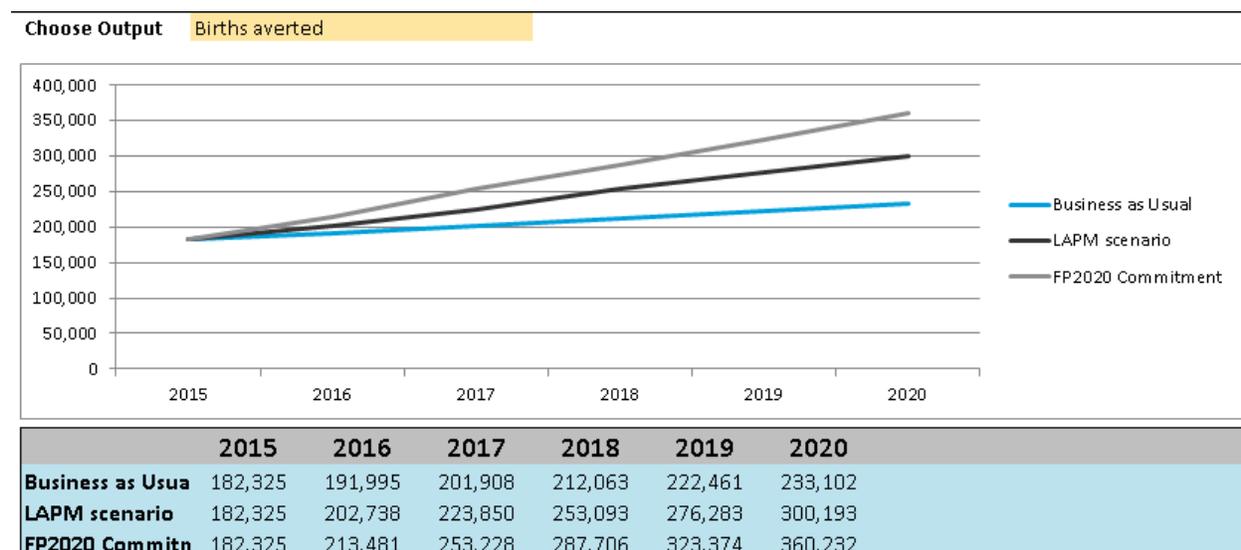
On the third tab, enter the annual FP cost per user for each method. Ideally, the cost per user would be comprehensive, including indirect costs and commodities. However, if you prefer, you may use commodity costs only. If only commodity costs are used make sure to clarify when presenting the results that FP costs do not represent the full programmatic costs.

Outputs

Once you have completed the **Inputs** and **Set Policy Goals** sections, the results will appear in the **Outputs** section. This section is divided into four tabs: “Indicator Analysis,” “Summary Tables,” “Scenario Comparison,” and “Incremental Cost-Effectiveness Ratio.”

Indicator Analysis

The first tab is “Indicator Analysis.” You should select an indicator of interest from the yellow drop-down menu above the graph. The model will then graph the results for all three scenarios and display the annual values for each scenario in the table below. On the right side of the page is a box with the main policy goal, which serves as a reminder; this box cannot be edited. This tab allows you to quickly see the results of the outputs of greatest interest, both graphically and numerically, and to compare these results across the three scenarios.



Summary Tables

The second tab in the **Outputs** section is “Summary Tables.” There is one table for each scenario; each table provides the annual values for all outputs. This tab displays all results in one location. This may be useful if you wish to copy and paste all of the results into a new Excel file for custom graphics or analysis.

Scenario Comparison

The third tab in the **Outputs** section is “Scenario Comparison.” This table shows a quick comparison of the cumulative values of each output across the three scenarios. For each output (except the cost-benefit ratio), the values compared here are cumulative for the entire time period; that is, the sum of all annual values. (The cost-benefit ratio compared here is the average across all years.)

The first part of the table reports the cumulative values for each output. The second part of the table compares the second and third scenarios to the first, which is assumed to be a baseline scenario. The third part of the table states the comparison as a percentage of the first scenario value; this has the benefit of expressing the size of the difference in outputs relative to the absolute level of output.

This table presents the outputs in terms that may be useful for creating advocacy materials. Example statements that could be made based on the table below include, “By reaching our FP2020 commitment, we estimate that we would avert more than half a million unintended pregnancies,” and “By shifting to LAPM, we estimate a 15 percent reduction in maternal deaths by 2020.”

Indicator	Business as Usual	LAPM scenario	FP2020 Commitment	Incremental difference compared to Business as		Percentage difference compared to Business as	
				LAPM scenario	FP2020 Commitment	LAPM scenario	FP2020 Commitment
Unintended pregnancies averted	1,734,229	2,005,586	2,259,149	271,358	524,920	16%	26%
Births averted	1,243,854	1,438,482	1,620,346	194,628	376,492	16%	26%
Maternal deaths averted	3,161	3,626	4,064	466	903	15%	25%

Incremental Cost-Effectiveness Ratio

The fourth tab in the **Outputs** section is the “Incremental Cost-Effectiveness Ratio.” The second and third scenario outcomes and FP costs are compared with the FP costs and outcomes in the first scenario. The incremental costs are then divided by the incremental outcomes to arrive at the ICER. The ICER tells us the amount of additional funds that must be invested in family planning to achieve each additional unit of the selected outcome. Based on the example below, you could state, “We estimate that by switching to more LAPM use we could avert one unintended pregnancy for each US\$20 invested in family planning.”

This tab analyzes one indicator at a time; you can select the indicator of interest from the yellow drop-down menu. The table shows the exact values, while the graph shows one point for each scenario. In this analysis, the first scenario serves as a baseline against which the second and third scenarios are compared.

Unintended pregnancies averted

Program	FP Costs	Outcomes	Incremental FP Costs	Difference in X outcome	ICER
Business as Usual	\$ 39,834,530	1,734,229			
LAPM scenario	\$ 45,287,274	2,005,586	\$ 5,452,744	271,358	\$ 20
FP2020 Commitment	\$ 50,740,018	2,259,149	\$ 10,905,487	524,920	\$ 21

METHODOLOGY

Overview

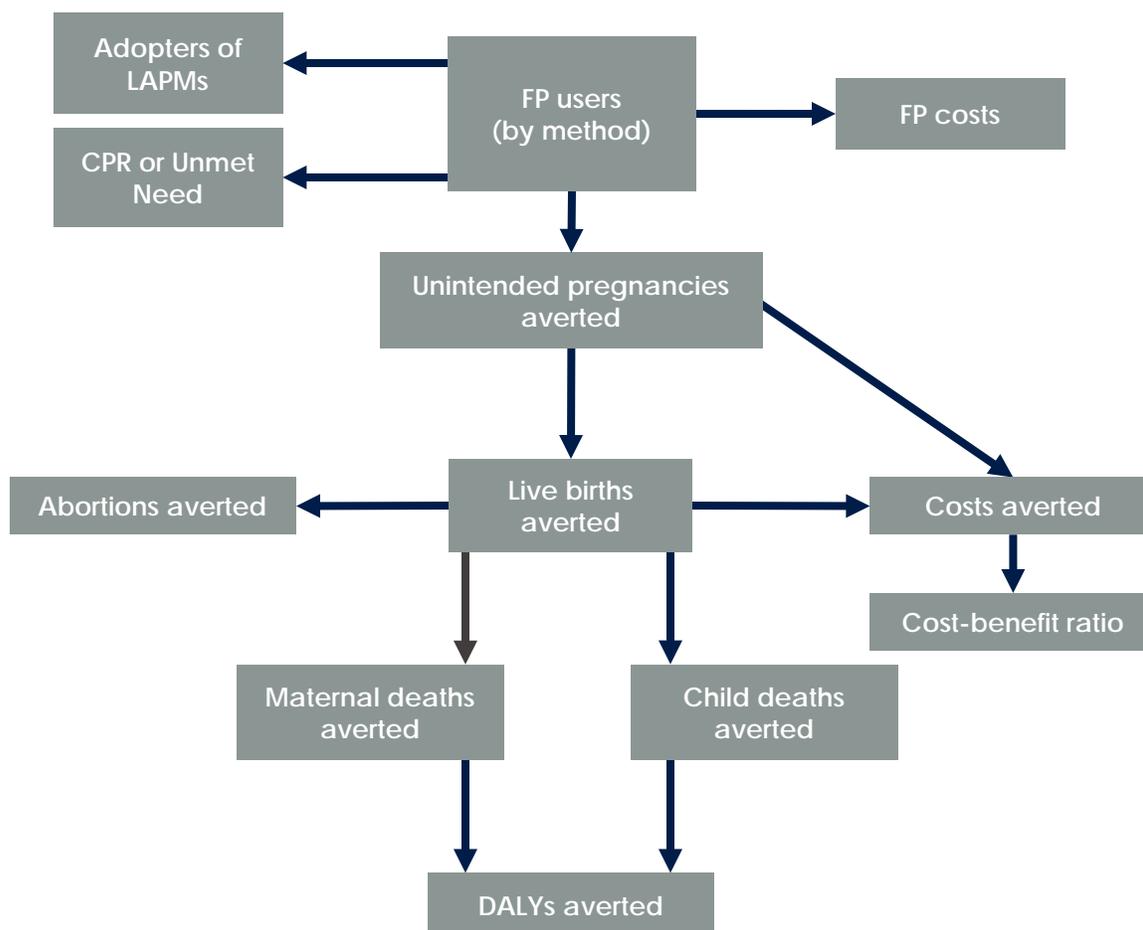
The calculations in ImpactNow flow in a linear cascade, beginning with the number of users of each family planning method. The numbers of unintended pregnancies averted, and subsequent live births averted, are based on the number of users of each method. In turn, maternal and infant deaths averted are based on the number of live births averted; disability-adjusted life years (DALYs) averted are based on maternal and infant deaths averted.

The three different policy goal options (CPR, Unmet Need, and Future Budgets) entail different calculations to arrive at the number of FP users. However, the subsequent calculations are identical, regardless of which policy goal you select.

Costs of family planning are based on the number of users of each method. Costs averted are based on the average costs associated with a pregnancy and a live birth.

All outputs are calculated for each year of the analysis, using the projected number of users, method mix, and FP costs associated with that year. Each year is an independent calculation and does not depend on the results of the previous year. Where the inputs are only for the first and final year of a value, a constant linear scale-up for intermediate years is assumed.

Figure 1: Methodological Framework



Women of reproductive age at risk for unintended pregnancy

The first step is to understand how many women of reproductive age (WRA) are considered at risk for unintended pregnancies. If you select “All women of reproductive age” on the **Configuration** page, ImpactNow will apply the calculations to all women ages 15–49. If you select “Only women in union of reproductive age,” the model will apply the percentage of women in union to the total number of women ages 15–49. Under this scenario, only those women will be considered at risk for unintended pregnancy. Note that the default method mix is dependent on which group of women is selected.

Contraceptive prevalence rate

ImpactNow requires you to select one of three types of policy goal: increasing CPR, reducing Unmet Need, or increasing total Future Budgets. Depending on the national context and advocacy focus, select the most relevant option.

If you select a CPR policy goal, the annual CPR calculation is straightforward: ImpactNow does a linear interpolation between the base- and end-year contraceptive prevalence rates.

If you select an Unmet Need policy goal, ImpactNow first does a linear interpolation between the base- and end-year unmet need. Then, the model assumes that each percentage point decrease in unmet need is equivalent to a percentage point increase in CPR. For example, if the base-year CPR is 30 percent, the base-year unmet need is 20 percent, and the end-year unmet need is 15 percent, then ImpactNow would calculate the end-year CPR to be 35 percent. The five percentage point decrease in unmet need is assumed to be equivalent to a five percentage point increase in CPR.

If you select a Future Budgets goal, ImpactNow divides the number of users by the number of women at risk for unintended pregnancy to arrive at the CPR.

$$\text{CPR} = \text{total FP users/women at risk of unintended pregnancy}$$

CPR is only shown as a result when you select an Unmet Need or Future Budgets goal. When you select a CPR goal, the CPR is simply a linear interpolation between the inputs.

Unmet need

Unmet Need is assumed to have an inverse relationship with CPR; that is, for each percentage point increase in CPR, unmet need is assumed to decrease by one percentage point. For example, if the base-year unmet need is 27 percent, the base-year CPR is 35 percent and the end-year CPR is 39 percent, then ImpactNow would calculate the end-year unmet need to be 23 percent.

Under the CPR and Future Budgets goals, an unmet need level must be specified for the base year. ImpactNow then calculates future levels of unmet need as the inverse of the CPR calculations.

Users of family planning

The next step is to calculate the number of users of each method. The equation is

$$\text{Users}_{\text{Method X}} = \text{women at risk for unintended pregnancy} * \text{CPR} * \text{method mix}_{\text{Method X}}$$

If you select a Future Budgets goal, ImpactNow takes a different approach to calculating the number of users of each method. Like the other two policy goals, ImpactNow assumes a linear interpolation of the total Future Budget between the base and end years. It first calculates the average cost per user as a weighted average of the method-specific cost per user, weighted by the method mix:

$$\text{Average cost-per-user} = \sum_{i=1}^n \text{CostPerUser}_i * \text{MethodMix}_i$$

The total Future Budget is then divided by the average cost per user. The product tells us how many FP users the FP program can afford, given the total budget and the average cost per user.

$$\text{Total FP users} = \text{total Future Budget} / \text{average cost per user}$$

All of the FP users are then distributed across the various methods according to the method mix:

$$\text{Users}_{\text{Method X}} = \text{total FP users} * \text{method mix}_{\text{Method X}}$$

Acceptors of long-acting and permanent methods

ImpactNow estimates the annual number of acceptors (i.e., people who begin to use each type of LAPM each year). Because these methods last more than one year, the model must first make assumptions about how many users began LAPM use before the base year of the analysis, because they may continue use into your analysis period. Our estimate of acceptors is the difference between these continuers and the users of each method, which we have previously calculated.

Acceptors of LAPM are calculated based on LAPM users during the analysis period, as well as assumptions about acceptors of LAPM in past years. Two tables are used to calculate the acceptors of each LAPM. The first table is populated by hypothetical numbers which do not represent actual women, but are used to calibrate past cohorts of LAPM acceptors. The second table is scaled up so that the numbers in each cell represent actual women. Each LAPM has its own pair of tables, which go back as many years into the past as the years of method effectiveness of that particular method. For example, the table for a five-year intrauterine device (IUD) goes back in time five years before the start date of the analysis.

Each “dummy” table starts with the assumption that there was a linear scale-up in the number of acceptors of that method in past years. For example, for the five-year IUD, the model assumes that five years before the start date of our analysis, one hypothetical woman accepted the IUD; four years ago two hypothetical women accepted; three years ago, three accepted; and so forth. These hypothetical numbers

are then projected forward in time, using continuation rates. As you can see in the sample table below, the “Year of Analysis” is shown in columns and the “Year of Insertion” is shown in rows. This table corresponds to an analysis conducted with a base year of 2014 (the column outlined in bold) and an end year of 2020.

Table 1: Sample LAPM Hypothetical Acceptors Table, Five-year IUD, 2014–2020 Analysis

		Year of Analysis											
		2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Year of Insertion	2009	0.94	0.82	0.71	0.62	0.54							
	2010		1.87	1.64	1.43	1.25	1.09						
	2011			2.81	2.45	2.14	1.87	1.63					
	2012				3.75	3.27	2.86	2.49	2.18				
	2013					4.68	4.09	3.57	3.12	2.72			
	2014						5.62	4.91	4.29	3.74	3.27		
SUM							15.53						

The light grey cells on the diagonal are where the year of analysis and the year of insertion align; that is, they represent the starting cohorts of IUD acceptors in that year. These starting cohorts (in light grey, on the diagonal) are based on the assumption that the first cohort was one woman; the second was two; the third was three; etc. They have been discounted for half a year of discontinuation, under the assumption that IUD insertion happened throughout the year, but the cohort is counted on December 31. Tracing one row (for example, 2011) forward in time to the right, we see with each year/column there are fewer hypothetical women remaining in each cohort. Starting with the 2011 cohort, some hypothetical women have the IUD removed in 2012, more have it removed in 2013, and so on. The annual decline in each cohort is based on continuation rates used in MSI’s Impact 2 model (Marie Stopes International, 2012). Because this IUD only lasts for five years, by 2016 there are no more hypothetical women from the 2011 cohort considered to be still using the IUD.

The purpose of the dummy table is to create artificial past acceptor cohorts for a specific LAPM to make projections about future numbers of acceptors. It is necessary to make assumptions about past use because LAPM use often carries forward from one year to the next. Therefore, to calculate the number of LAPM users who are new acceptors in any given year of the analysis, assumptions must be made about LAPM continuers.

Once the dummy table has been established, it can be scaled up to match numbers of real women using that LAPM. To do this, you should sum the total users in the dummy table in the base year of the analysis (in the example above, 2014), then divide the number of users of that LAPM (taken from the FP users calculation above) by the hypothetical users from the dummy LAPM table. In the example, there are 40,387 users of the five-year IUD. Therefore, the scale factor for the IUD is $17,447/15.53 = 1,123$. That is, each person in the dummy table represents 1,123 IUD users. This scale factor is used to create the second table (where the numbers represent actual women) to project future numbers of acceptors.

Table 2: Sample LAPM Acceptors Projection Table, Five-year IUD, 2014–2020 Analysis

		Year of Analysis											
		2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Year of Insertion	2009	1,052	919	803	701	612							
	2010		2,105	1,838	1,605	1,402	1,224						
	2011			3,157	2,757	2,408	2,103	1,836					
	2012				4,210	3,676	3,210	2,804	2,448				
	2013					5,262	4,595	4,013	3,504	3,060			
	2014						6,315	5,514	4,816	4,205	3,672		
	2015							3,365	2,753	2,404	2,099	1,833	
	2016								4,097	3,351	2,926	2,556	2,232
	2017									4,683	3,830	3,345	2,921
	2018										5,261	4,303	3,758
	2019											5,838	4,775
	2020												4,275

The numbers in this table represent actual women using the IUD. The entire table is calibrated around the first year of analysis, outlined in bold (in this example, 2014). That is, the sum of all users in 2014 in this table (summing the values in the 2014 column) is equal to the sum of all users in 2014 taken from the FP users calculation above. To project future numbers of users, the continuer cohorts are first projected forward in their rows to the right, using annual continuation rates. Then, in years beyond the base year, the number of continuers in each year of analysis is summed and compared with the corresponding number of users from the previous calculation. The difference between the number of IUD users (using the methodology in the previous section) and the number of continuers is the calculated number of acceptors for that year (highlighted in yellow on the diagonal). Thus, the acceptors highlighted in yellow are calculated as the residual between the number of IUD users and the number of IUD continuers from past years. For example, the number of acceptors in 2017 is calculated using the following formula:

$$\mathit{acceptors}_{2017} = \mathit{users}_{2017} - \sum_{2013}^{2016} \mathit{continuers}$$

In turn, the continuers in 2017 are calculated as

$$\sum_{2013}^{2016} \mathit{continuers} = \mathit{acceptors}_{2013} * 4.5 \text{ year continuation rate} + \mathit{acceptors}_{2014} * 3.5 \text{ year continuation rate} + \mathit{acceptors}_{2015} * 2.5 \text{ year continuation rate} + \mathit{acceptors}_{2016} * 1.5 \text{ year continuation rate}$$

In the 2017 example (shown in

Table 2 above), ImpactNow first sums up the number of continuers from past cohorts from the 2017 column: $3,060 + 4,205 + 2,404 + 3,351 = 13,020$. The model then compares the total number of continuers with the number of users it previously calculated. In this case, there are 17,703 users of the five-year IUD. ImpactNow then calculates the number of acceptors in 2017 as the difference between the number of users and the number of continuers: $17,703 - 13,020 = 4,683$.

Acceptors are calculated in this way for all LAPMs. Because the annual results are dependent on assumptions made about past acceptors of LAPMs, they are presented in the ImpactNow results as an average across all years. This reconciles any year-to-year fluctuations inherent in the calculations.

For sterilization calculations, ImpactNow also takes age into account. The method's permanence means that some users will be older than users of other methods. It also requires that the model account for survival and aging out of the reproductive years, rather than discontinuation. Each cohort of sterilization acceptors is assumed to start at the median age at sterilization. Each year the cohort moves forward, its members age one year, and the concomitant survival rates of women of that age are applied. Thus each cohort shrinks slightly each year due to mortality of some women in that cohort. Once the median cohort age reaches 50, the surviving cohort of sterilization users goes to zero in the calculations. For male sterilization, the median age at female sterilization is also used, with the assumption that it represents the age of the man's partner. This is done for two reasons: first, because the fecundity of women varies with age much more than for men; and second, because the median age of male sterilization may not be known.

Pregnancies averted

Once the number of users by method is known, you can then calculate the unintended pregnancies averted. This calculation compares the failure rate of each method with the pregnancy rate of women with unmet need. (The method failure rate is the complement of the method effectiveness rate.) The latter serves as a counterfactual that estimates how many of these women might otherwise have had an unintended pregnancy in that year, in the absence of contraceptive use.

$$\text{Unintended pregnancies averted}_{\text{Method X}} = \text{users}_{\text{Method X}} * (\text{pregnancy rate of women with unmet need} - (1 - \text{effectiveness}_{\text{Method X}}))$$

The value of the pregnancy rate of women with unmet need depends on your selection in the **Inputs** section, where you selected the Low (23%), Medium (31%), or High (38%) pregnancy rate for women with unmet need (the selection is made separately for each scenario). This inter-quartile plausibility range was estimated using the *Adding It Up* methodology (Singh and Darroch, 2012). The national pregnancy rate among women with unmet need was estimated for 148 developing countries. Each national estimate was obtained by dividing the estimated number of annual unintended pregnancies by the total number of women with unmet need. The Low, Medium, and High values used in ImpactNow represent the 25th, 50th, and 75th percentiles of these national estimates. That is, 25 percent of the national estimates were below a 23 percent pregnancy rate, while 75 percent of the estimates were above 23 percent. Similarly, 75 percent of the national estimates were below, 25 percent were above, a 38 percent pregnancy rate. Selecting the Low assumption will result in a higher estimated number of unintended pregnancies averted by family planning, while selecting the High assumption will result in a lower estimated number. The default setting in ImpactNow is to use the Medium estimate of a 31 percent annual pregnancy rate for women with unmet need.

In the case of LAPM, the calculations also account for the users' age. LAPM users, particularly sterilization users, may be older than users of short-term methods due to the long-term nature of the methods. The average age of users for each LAPM is calculated using the acceptors tables, which show the distribution of users by time since acceptance. A discount factor is then applied to the pregnancy rate of women with unmet need, according to the average age of the LAPM users in that year.

Table 3: Age-Specific Fertility Discount Factors

Age range	Fertility discount factor
15-19	1
20-24	1.5
25-29	1.3
30-34	1.1
35-39	1
40-44	0.6
45-49	0.1

Source: Weinberger et al., 2012

Unintended pregnancies averted are added across all methods. Subsequent calculations do not require any information about FP methods, but rather are calculated based on total unintended pregnancies averted.

Live births averted

In order to calculate live births averted, we account for all the possible outcomes per unintended pregnancy:

$$UP = LB + SB + A + M_a + M_b$$

UP: Unintended pregnancy

LB: Live birth

SB: Stillbirth. Because the stillbirth rate is standardly expressed in terms of stillbirths per 1,000 total births, a small adjustment is made to express the stillbirths in terms of all live births:

$$SB = \text{stillbirth rate} / (1,000 - \text{stillbirth rate})$$

A: Abortion

M_a: Miscarriage that would have led to abortions. The model assumes that there are .07 miscarriages per abortion (Hammerslough, 1992).

M_b: Miscarriages that would have led to births. The model assumes that there are 0.2 miscarriages per pregnancy that reaches 27 weeks (Hammerslough 1992).

We estimate the number of live births per unintended pregnancy by solving the following:

$$LB \text{ per UP} = \frac{(1 - \% \text{ UP that end in A} - (\% \text{ UP that end in A} * M_a))}{(1 + Mb + (\frac{SB}{1000 - SB}) * Mb) + (\frac{SB}{1000 - SB})}$$

To calculate the number of live births averted:

$$\text{Live births averted} = \text{UP averted} * \text{LB per UP}$$

Abortions averted (total and unsafe)

The outcome abortions averted is calculated by multiplying the percentage of unintended pregnancies ending in abortion by the number of unintended pregnancies averted:

$$\text{Abortions averted} = \% \text{ unintended pregnancies ending in abortion} * \text{unintended pregnancies averted}$$

The number of unsafe abortions averted is calculated by multiplying abortions averted by the percentage of abortions that are unsafe:

$$\text{Unsafe abortions averted} = \text{abortions averted} * \% \text{ abortions that are unsafe}$$

Maternal deaths averted

Estimates of maternal deaths averted due to FP use are based on an adjustment made to the maternal mortality ratio (MMR) to account for the specific risk of dying from an unintended, rather than average, pregnancy. This adjustment and the subsequent computation of maternal deaths averted is a three-step process:

Step 1: To compute unintended pregnancy-specific MMR, calculate the mortality risk associated with each live birth by accounting for the deaths associated with other pregnancy outcomes:

$$\text{MMR} = \text{LB}_m + \text{SA}_m + \text{UA}_m + \text{SB}_m + \text{M}_m$$

LB_m: Live birth mortality, calculated.

SA_m: Safe abortion mortality. The model assumes two deaths per 100,000 safe abortions.

UA_m: Unsafe abortion mortality. Calculated as MMR * Unsafe Abortion Mortality Ratio.

SB_m: Stillbirth mortality. Given limited evidence on stillbirth-associated mortality rates, the total MMR (unadjusted) is used as the mortality risk.

M_m: Miscarriage mortality. Given limited evidence on miscarriage-associated mortality rates, the total MMR (unadjusted) is used as the mortality risk.

$$\begin{aligned} \text{LB}_m = & \left[\frac{\text{MMR}}{100,000} \right] - \left(\left(\frac{\text{abortion ratio}}{100} \right) * (1 - \% \text{ abortions that are unsafe}) * \left(\frac{2}{100,000} \right) \right) \\ & + \left(\left(\frac{\text{abortion ratio}}{100} \right) * (\% \text{ abortions that are unsafe}) * \left(\frac{\text{MMR}}{100,000} * \text{unsafe abortion to MMR ratio} \right) \right) \\ & + \left(\left(\frac{\text{abortion ratio}}{100} \right) * M_a * \left(\frac{\text{MMR}}{100,000} \right) \right) + \left(\left(1 + \left(\frac{\text{SBR}}{1000 - \text{SBR}} \right) \right) * M_b * \left(\frac{\text{MMR}}{100,000} \right) \right) \\ & + \left(\left(\frac{\text{SBR}}{1000 - \text{SBR}} \right) * \left(\frac{\text{MMR}}{100,000} \right) \right) \end{aligned}$$

Where:

M_a = Miscarriage that would have led to abortions. The model assumes that there are .07 miscarriages per abortion (Hammerslough 1992).

M_b = Miscarriages that would have led to births. The model assumes that there are 0.2 miscarriages per pregnancy that reaches 27 weeks (Hammerslough, 1992).

SBR = Stillbirth rate

Step 2: Combine the mortality risks of each unintended pregnancy outcome to calculate maternal deaths per unintended pregnancy:

$$\begin{aligned}
 \text{Maternal deaths per unintended pregnancy} = & (LB_m * LB \text{ per UP}) + \\
 & \left(\% \text{ UP that end in A} * \% \text{ abortions that are unsafe} * \frac{MMR}{100,000} * \text{unsafe abortion to MMR ratio} \right) + \\
 & \left(\% \text{ UP that end in A} * (1 - \% \text{ of abortions that are unsafe}) * \left(\frac{2}{100,000} \right) \right) + \\
 & \left(\% \text{ UP that end in A} * M_a * \frac{MMR}{100,000} \right) + \\
 & \left(\left(LB \text{ per UP} + \left(\left(\frac{SBR}{1000 - SBR} \right) * LB \text{ per UP} \right) * M_b * \frac{MMR}{100,000} \right) \right) + \\
 & \left(\left(\left(\frac{SBR}{1000} - SBR \right) \right) * LB \text{ per UP} \right) * \frac{MMR}{100,000}
 \end{aligned}$$

Where:

LB_m = Live birth mortality (calculated above).

LB per UP = Live births per unintended pregnancy (calculated above).

% UP that end in A = Percentage of unintended pregnancies that end in abortion (user input).

M_a = Miscarriage that would have led to abortions. The model assumes that there are .07 miscarriages per abortion (Hammerslough, 1992).

SBR = Stillbirth rate

M_b = Miscarriages that would have led to births. The model assumes that there are 0.2 miscarriages per pregnancy that reaches 27 weeks (Hammerslough, 1992).

Step 3: Calculate the maternal deaths averted:

Maternal deaths averted = Unintended pregnancies averted * maternal deaths per unintended pregnancy

Child deaths averted

Child deaths averted are based on the concept that longer spacing between births results in lower child mortality. Previous birth interval (PBI) coefficients were estimated for each country (Weinberger et al., 2012). The PBI coefficient represents the number of child deaths estimated to be averted for each live birth averted. Thus, the total number of child deaths averted is calculated as follows:

$$\text{Child deaths averted}_{\text{Country X}} = \text{live births averted}_{\text{Country X}} * \text{PBI coefficient}_{\text{Country X}}$$

DALYs averted

Disability-adjusted life years are metrics that estimate years of healthy life lost due to a specific health issue. Calculations of DALYs averted due to various health interventions provide one way to compare different types of interventions across different health issues. A DALY is the sum of two components: YLL (years of life lost) and YLD (years lost to disability). YLL for a specific condition are those years lost due to premature mortality. YLD are a fraction of those years lived with a disability due to a specific condition. In ImpactNow, DALYs are averted in two different health areas: maternal health and child health.

For maternal health

$$\text{DALYs averted} = \text{YLL averted} + \text{YLD averted}$$

$$\text{DALYs averted} = (\text{maternal deaths averted} * \text{YLL per maternal death averted}) + (\text{maternal deaths averted} * \text{YLL per maternal death averted}) * \text{DALY ratio (YLD/YLL) all maternal conditions}$$

For child health

$$\text{DALYs averted} = \text{child deaths averted} * \text{YLL per child death averted}$$

ImpactNow reports the total DALYs averted, summing the child and maternal DALYs averted:

$$\text{Total DALYs averted} = \text{maternal DALYs averted} + \text{child DALYs averted}$$

Region-specific values for YLL per maternal death averted, DALY ratio for all maternal conditions, and YLL per child death are taken from the 2010 Global Burden of Disease report (IHME, 2013).

Family planning costs

Total costs invested in family planning are based on the number of users of each method, and the annual cost of each method:

$$\text{Total FP costs} = \sum_{i=1}^n \text{users of method}_i * \text{annual cost – per – user of method}_i$$

FP costs are only displayed as an output when you select either a CPR or Unmet Need goal.

Healthcare costs averted

Healthcare costs averted are those normally incurred in the course of pregnancy, childbirth, and some basic neonatal costs. First, the model calculates average costs per pregnancy and per live birth.

If you select “Full Access” on the **Inputs** page, then the average cost calculations assume that all women/births needing each intervention will receive it. In this case

average cost per pregnancy

$$= \sum_{i=1}^n \% \text{ of women in need}_{\text{Intervention } i} * \text{Cost of treatment}_{\text{Intervention } i}$$

average cost per live birth

$$= \sum_{i=1}^n \% \text{ of births in need}_{\text{Intervention } i} * \text{Cost of treatment}_{\text{Intervention } i}$$

If you select “Actual Access” on the **Inputs** page, then the average cost calculations assume that only the current fraction of women/births that actually receive that intervention will receive it in the case of unintended pregnancies averted. In this case

average cost per pregnancy

$$= \sum_{i=1}^n \% \text{ of women in need}_{\text{Intervention } i} * \% \text{ of women in need who receive}_{\text{Intervention } i} \text{ Cost of treatment}_{\text{Intervention } i}$$

average cost per live birth

$$= \sum_{i=1}^n \% \text{ of births in need}_{\text{Intervention } i} * \% \text{ of births in need who receive}_{\text{Intervention } i} \text{ Cost of treatment}_{\text{Intervention } i}$$

Total healthcare costs averted are always a sum of the pregnancy costs averted and the birth costs averted.

Cost-benefit ratio

The cost-benefit ratio expresses the costs saved for every cost invested in FP.

$$\text{Cost-benefit ratio} = \text{total healthcare costs averted} / \text{total FP costs}$$

$$\text{Total healthcare costs averted} = \text{unintended pregnancies averted} * \text{average cost per pregnancy} + \text{live births averted} * \text{average cost per birth}$$

Incremental cost-effectiveness ratio

The incremental cost-effectiveness ratio is a way of expressing how much more money would have to be invested to receive more of a specific output. The ICER calculation always compares one of the two policy scenarios with the base scenario. For the ICER calculation, you must first choose the output in which you are interested.

For example, you may be interested in maternal health and want to know how much more money must be invested in family planning to prevent one more maternal death. In this case, the ICER would compare the investments in family planning in the base and policy scenarios, and also compare the maternal deaths averted in the base and policy scenarios. The formula is

$$\text{ICER}_{\text{Outcome X}} = (\text{FP costs in policy scenario} - \text{FP costs in base scenario}) / (\text{outcome X in policy scenario} - \text{outcome X in base scenario})$$

For example, if the base scenario costs US\$259 million and averts 34,114 maternal deaths, while the policy scenario costs US\$278 million and averts 36,673 maternal deaths, then the ICER would be

$$\begin{aligned} \text{ICER}_{\text{maternal deaths averted}} &= (\$278,000,000 - \$259,000,000) / (36,673 - 34,114) \\ &= \$7,425 \text{ per maternal death averted.} \end{aligned}$$

That is, each incremental US\$7,425 invested in family planning averts one more maternal death.

REFERENCES

Department of Reproductive Health and Research and World Health Organization (WHO). 2011. *Unsafe Abortion: Global and Regional Estimates of the Incidence of Unsafe Abortion and Associated Mortality in 2008, 6th edition*. Geneva: WHO.

Hammerslough CR. 1992. “Estimating the Probability of Spontaneous Abortion in the Presence of Induced Abortion and Vice Versa.” *Public Health Rep* (107)3: 269-277.

Institute for Health Metrics and Evaluation (IHME). 2013. *The Global Burden of Disease: Generating Evidence, Guiding Policy*. Seattle: IHME.

Marie Stopes International. 2012. Impact 2. Available at <http://mariestopes.org/Impact-2>.

Singh, Susheela and Jacqueline E. Darroch. 2012. *Adding It Up: Costs and Benefits of Contraceptive Services—Estimates for 2012*. New York: Guttmacher Institute and United Nations Population Fund.

Weinberger, M., F. Pozo-Martin, T. Boler, K. Fry, and K. Hopkins. 2012. *Impact 2: An Innovative Tool for Estimating the Impact of Reproductive Health Programmes—Methodology Paper*. London: Marie Stopes International.

WHO, United Nations Children’s Fund (UNICEF), United Nations Population Fund (UNFPA), The World Bank, and United Nations Population Division. 2014. *Trends in Maternal Mortality: 1990 to 2013, Estimates by WHO, UNICEF, UNFPA, The World Bank and the United Nations Population Division*. Geneva: WHO.

EXERCISE 1: GETTING STARTED

Introduction

ImpactNow is an Excel-based model that estimates the health and economic impacts of family planning in the near term. It is designed to model the impacts of different policy scenarios and estimate the answers to many “what if” questions about policy options. For example, you may want to know answers to questions such as, “What are the reproductive health impacts of reaching our FP2020 commitment?”

To become familiar with the tool, you will complete practice exercises which look at the estimated impact of different contraceptive prevalence rate (CPR) goals. ImpactNow allows analysts to look at three CPR goals simultaneously and produces the estimated health outcomes and economic impact associated with these goals. It should be noted, however, that estimates produced by these exercises are for training only.

The ImpactNow tool is populated by a database of default data, including demographics, incidence/prevalence rates, and international cost estimates for some reproductive health services. In general, you should review the default data and make changes as you see fit. For this training, examples use default data and hypothetical policy goals. The policy goals used in the training exercises should therefore not be considered “real” policy goals.

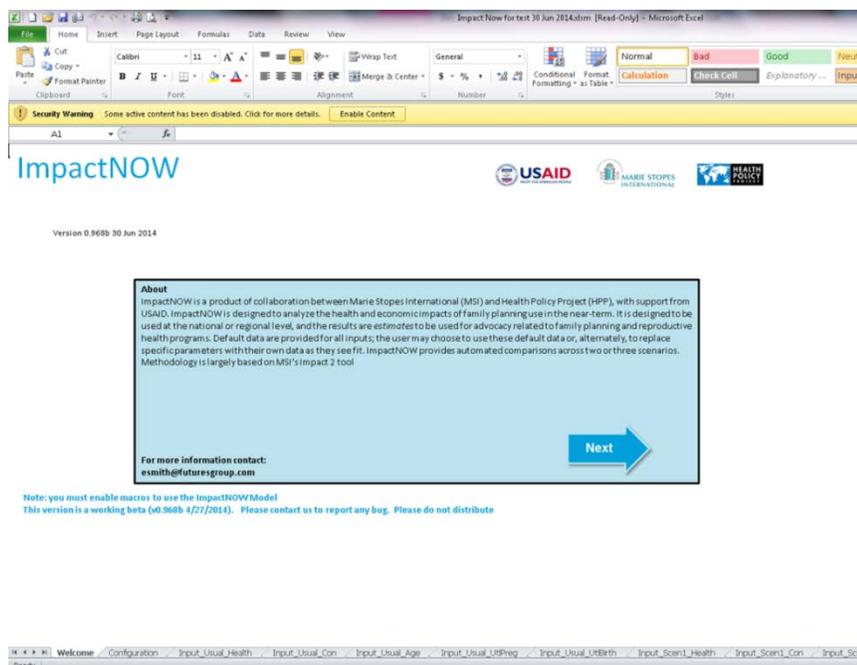
Saving and configuring

Objective: At the end of the exercise, you will be able to

- Save a new version of the ImpactNow tool to your computer
- Enable macros in the tool
- Configure ImpactNow to your region, population, and type of policy goal of interest

Task 1.1: Begin by double-clicking on the tool

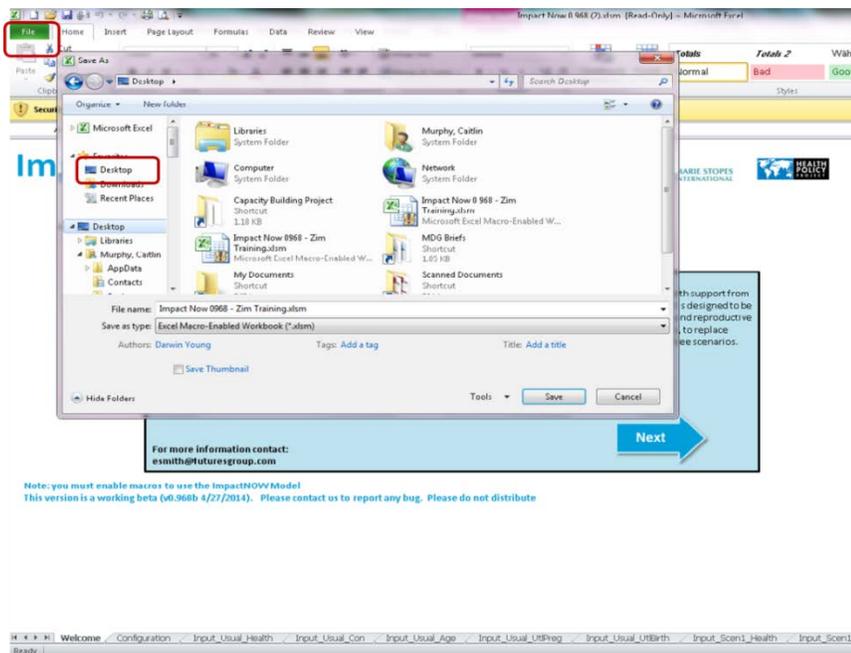
You will see the Welcome screen below, which denotes the version of ImpactNow you are using.



Task 1.2: Save and name a new version of ImpactNow, identifying it as a practice file.

You will want to name and save each new file you run with ImpactNow. This will help you pull up previous files.

- Click “File” → “Save As.”
- The Save As box will pop up, as in the picture below.

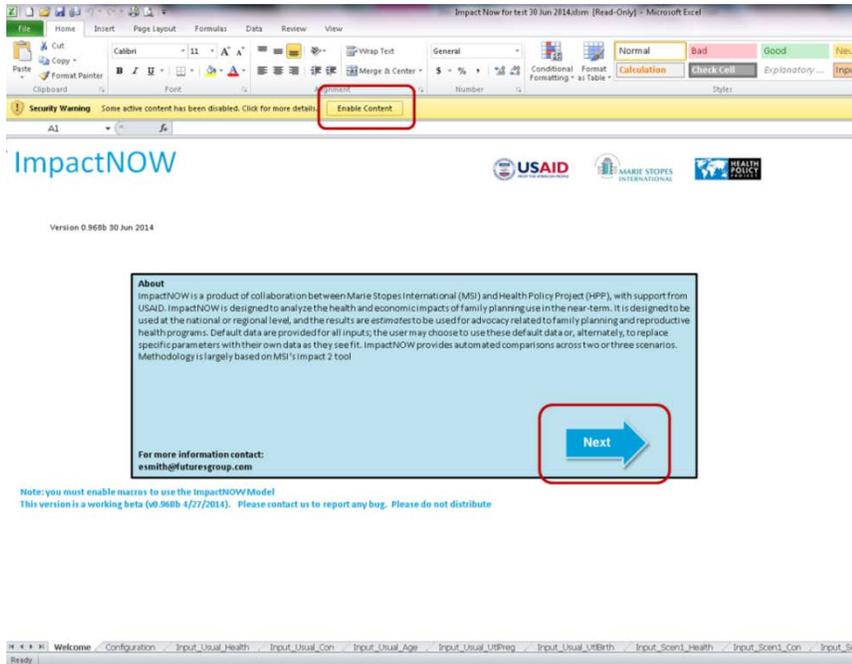


- Save this file to your desktop or another folder as “ImpactNow - Zim Training.”

Task 1.3: Enable macros to start using tool

To use ImpactNow, you will need to enable macros in Excel. Otherwise, you will not be able to move forward to the next screen.

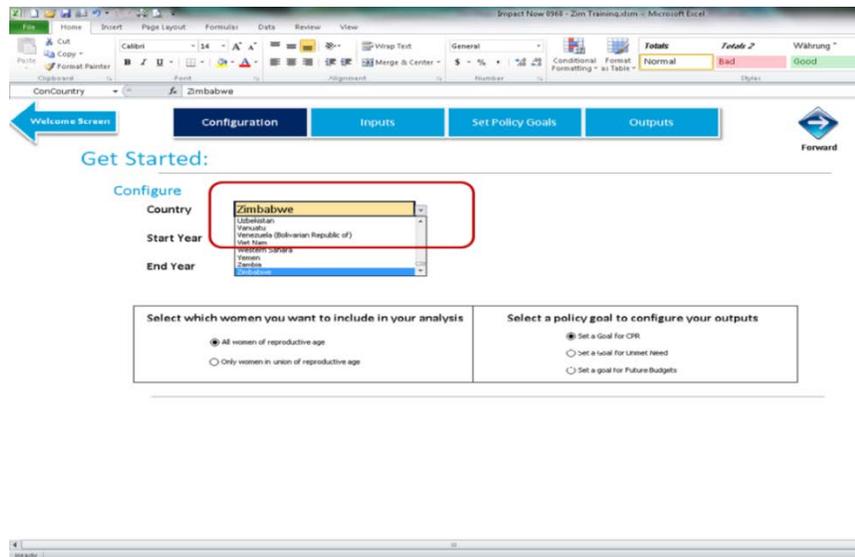
- You can enable macros by finding the yellow toolbar along the top of the screen.
- Click the “Enable Content” button within this toolbar.
- Click “Next.”



Task 1.4: Choosing the country and range of years

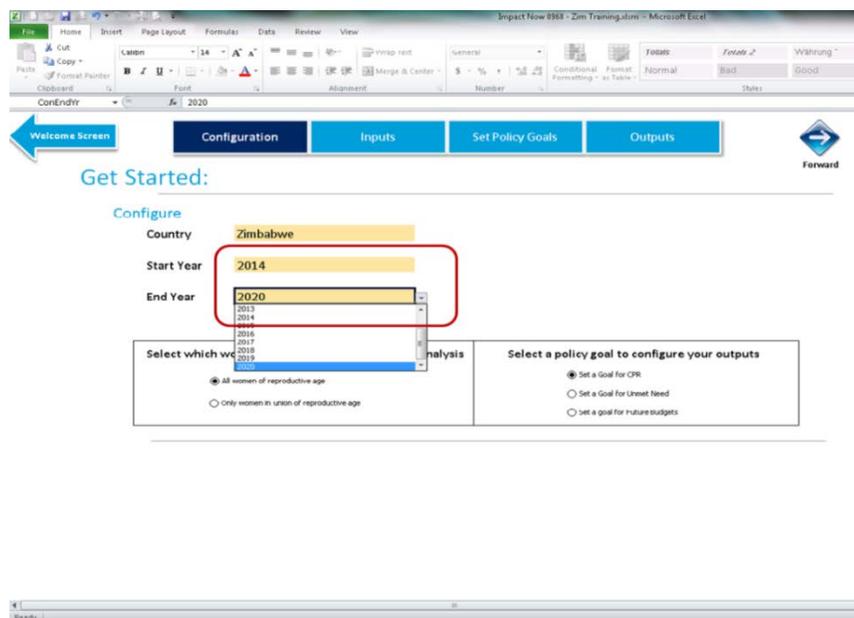
You are now in the **Configuration** page of the tool. Before running your estimate, you will need to select which country or region you are interested in exploring.

- From the “Country” dropdown menu, select “Zimbabwe.”



Next, you will need to select the range of years you are interested in observing. The “Start Year” serves as your baseline year, and “End Year” serves as the year for which your estimates will be calculated.

- For the Start Year, select 2014.
- For the End Year, select 2020.

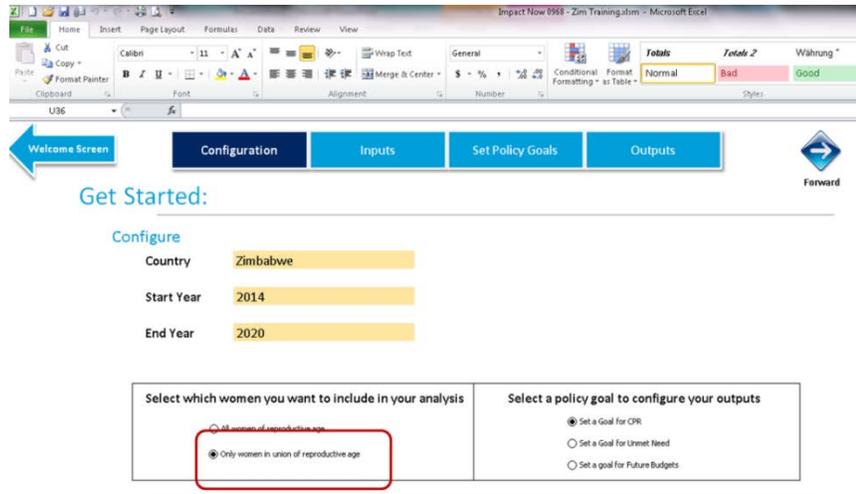


Task 1.5: Choosing the population of interest

Next, you will need to choose which range of women you would like to include in your analysis. You can choose “All women of reproductive age,” or “Only women in union of reproductive age” (women of reproductive age are defined as women ages 15–49).

The group you choose will constitute the population for which you are interested in observing FP benefits. Generally, it is advised that you choose the population of women who align with your country’s national FP priorities. This exercise will only look at married women of reproductive age.

- Select “Only women in union of reproductive age.”



Task 1.6: Choosing the type of policy goal

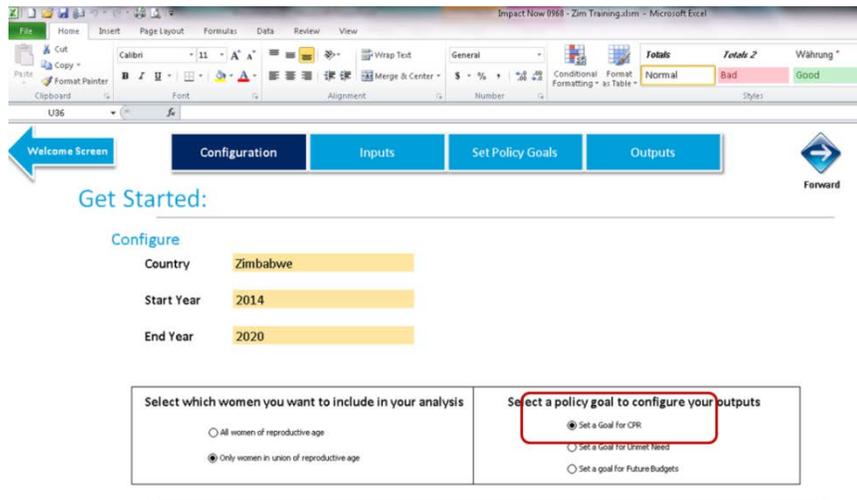
One of the key steps during configuration is selecting a type of policy goal. While you will enter a numeric goal later in the process, it is important to decide which type of policy you are interested in exploring at this step.

There are three policy types from which to choose:

1. **Set a Goal for CPR:** This type of policy goal will model the impact of increasing the percentage of women of reproductive age who use family planning.
2. **Set a Goal for Unmet Need:** This type of policy goal will model the impact of decreasing unmet need for family planning.
3. **Set a Goal for Future Budgets:** This type of policy goal will model the impact of increasing or decreasing FP budgets.

For the purposes of this exercise, we will choose to look at the CPR.

- Select “Set a Goal for CPR.”



- Save the file by clicking “File” → “Save” (at the top left of the page).

EXERCISE 2: MODIFYING INPUTS

Modifying select inputs from their default setting

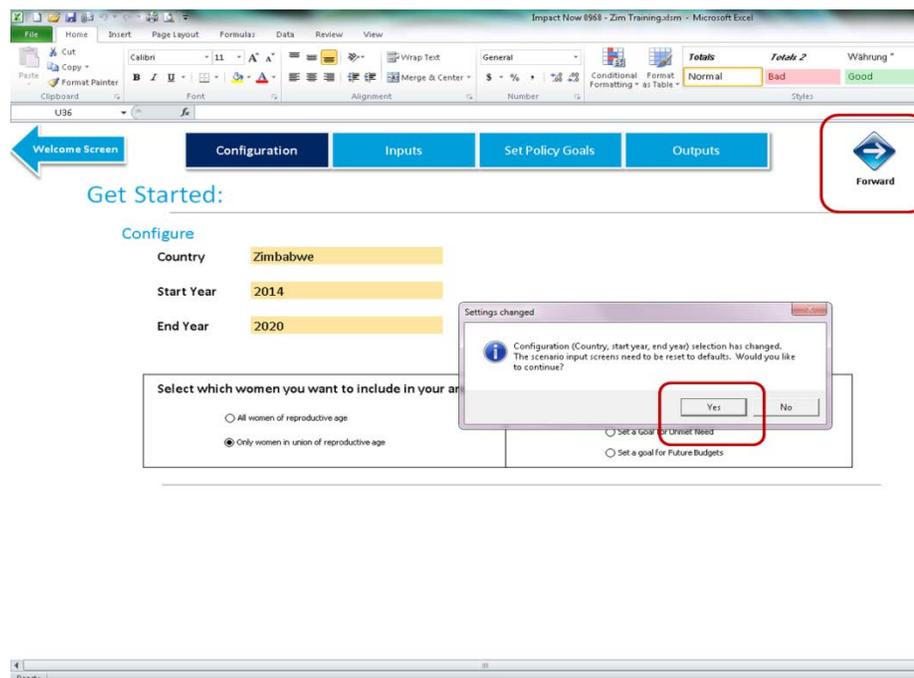
Objective: At the end of the exercise, you will be able to

- Access the **Inputs** page
- Review the input data in each input tab
- Modify select input data

Task 2.1: Navigate to the Inputs page

When your configurations are complete, you may move forward to the **Inputs** page.

- Click the “Forward” button at the top right portion of the screen to move into the **Inputs** page. Alternatively, you can click directly on the “Inputs” button in the navigation header.
- After clicking on one of these two buttons, a dialog box will appear. This box will appear every time you alter the tool’s configuration, and will alert you that all inputs are restored to their default settings after a configuration change.
- Click “Yes” to continue.



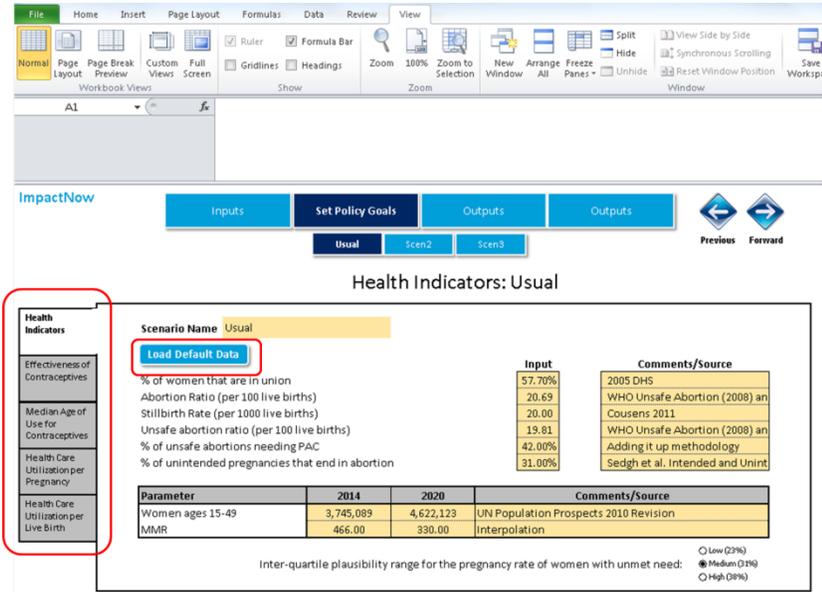
Task 2.2: Reviewing the input tabs

You should now see the **Inputs** page captured below. As mentioned previously, this page is populated by default data from ImpactNow’s database.

The first tab of inputs displayed, “Health Indicators,” includes several health indicators such as abortion rates, population, and maternal mortality rate. The source of each input is noted to the right of the input value.

You can navigate through other input categories by clicking through the tabs on the left side of the screen:

- Health Indicators
- Effectiveness of Contraceptives
- Median Age of Use for Contraceptives
- Health Care Utilization per Pregnancy
- Health Care Utilization per Live Birth



If you navigate back to the first input tab, “Health Indicators,” you will note that there is a button labeled “Load Default Data.” This button restores the default data for the country you selected on the **Configuration** page. This button is helpful if you have altered inputs, but would like to re-populate the page with default data.

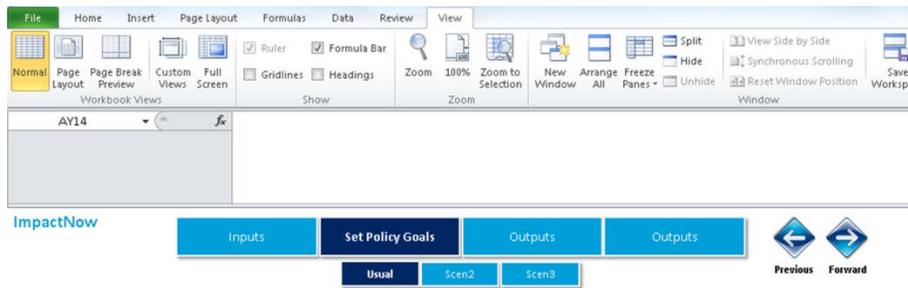
Task 2.3: Modifying inputs

ImpactNow can be used without any input modification. However, it is considered a best practice to check the default data against your local data sources, such as your local census or statistical agency, the Ministry of Health, and recent health surveys. Alternatively, you may have a data source you prefer to use over the default source.

This exercise walks through modifying two sample inputs.

Sample A: Modifying “% of women that are in union”

- Navigate to the “Health Indicators” input tab.
- Note that the percentage of women that are in union is 57.7 percent, as per the 2005 Demographic Health Survey (DHS). Since a new DHS was released in 2011, you can choose to update this input data.
- Type “2011 DHS” into the Comments/Source box.
- Type “62.2%” into the Input box.
- Both new entries should turn blue, indicating that they have been modified from the default.



Health Indicators: Usual

Health Indicators

Scenario Name: Usual

[Load Default Data](#)

Input	Comments/Source
62.20%	2011 DHS
20.69	WHO Unsafe Abortion (2008) an
20.00	Cousens 2011
19.81	WHO Unsafe Abortion (2008) an
42.00%	Adding it up methodology
31.00%	Sedgh et al. Intended and Unint

Parameter	2014	2020	Comments/Source
Women ages 15-49	3,745,089	4,622,123	UN Population Prospects 2010 Revision
MMR	466.00	330.00	Interpolation

Inter-quartile plausibility range for the pregnancy rate of women with unmet need:

○ Low (23%)
 ● Medium (31%)
 ○ High (38%)

Sample B: Modifying percentage who received antenatal care

- Navigate to the “Health Care Utilization per Pregnancy” input tab.
- Note that the first column of the table shows the percentage of pregnant women who need a specific health service, and that the second column shows the percentage of pregnant women in need who actually receive the service.
- Note that the percentage of women who receive antenatal care (ANC) is 42 percent, as per the 2012 *Adding It Up* report (Singh and Darroch, 2012).
- Hypothetically, you may know of a more recent source of ANC data, which cites the care received at 52 percent. You can update this input to reflect the more recent data.
- Type the new source into the Comments/Source box (for the purpose of this exercise, you may type “New data”).
- Type “52%” into the Input box.
- Both new entries should turn blue, indicating that they have been changed from their defaults.



Healthcare Utilization per Pregnancy: Usual

Treatment	% of pregnant women needing attention for:		Of the women who need care, the % that are able to receive:		Associated Costs for treatment of:	
	%	Comment	%	Comment	USD	Comment
Antenatal Care (ANC)	100%	RHCT	52%	New Data	16.90	RHCT
Treatment of Severe Anaemia	47%	RHCT	50%	Assumption	0.06	RHCT
Hypertensive Disorders of Pregnancy	6%	RHCT	50%	Assumption	7.25	RHCT
Malaria Prevention within ANC	100%	RHCT	14%	CHERG/OneHea	7.23	RHCT
Malaria Treatment within ANC (0 if all women receive ANC)	0%	RHCT	50%	Assumption	22.19	RHCT
Urinary Tract Infection (UTI)	25%	RHCT	13%	CHERG/OneHea	0.68	RHCT

Task 2.4: Applying input modifications to each policy scenario

A significant strength of the ImpactNow tool is its ability to observe the impact of multiple policy goals simultaneously. As such, you will need to apply the input changes you made to each policy scenario. This is a very important step, since you want to compare three scenarios that have identical percentages of women in union and ANC coverage inputs, but different CPR goals. (CPR policy goals will be entered in the next exercise.)

- Navigate to the “Health Indicators” tab of the **Inputs** page.
- Note the three scenario tabs below the navigation header: “Usual,” “Scen2,” and “Scen3.” Click through each tab to observe what they look like.
- You will also see a yellow bar below these tabs, located next to Scenario Name. This box allows you to rename the policy scenario in each tab.
- A best practice is to provide a descriptive name for each of the three policy scenarios, such as Base Case, Moderate CPR, and High CPR. For the purposes of this exercise, we will keep the default names of Usual, Scen2, and Scen3.

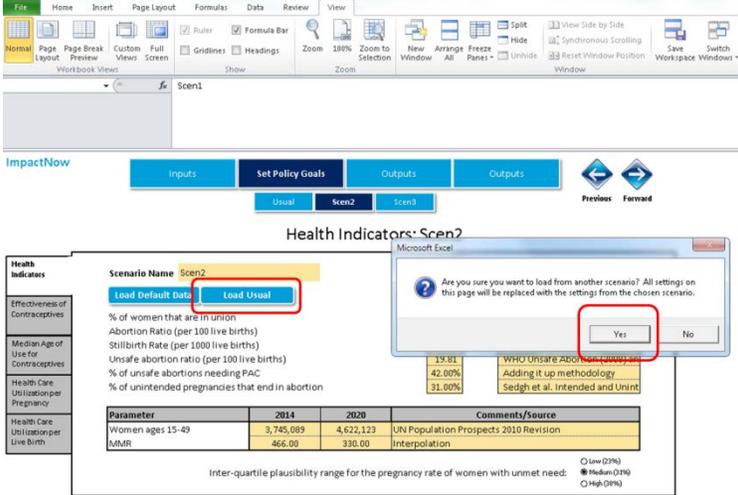
The screenshot shows the ImpactNow application window. The 'Inputs' tab is active, and the 'Health Indicators: Usual' sub-tab is selected. A red box highlights the 'Scenario Name' field, which contains the text 'Usual'. Below this, there are two tables: 'Input' and 'Comments/Source'.

Input	Comments/Source
% of women that are in union	2011 DHS
Abortion Ratio (per 100 live births)	WHO Unsafe Abortion (2008) an
Stillbirth Rate (per 1000 live births)	Cousens 2011
Unsafe abortion ratio (per 100 live births)	WHO Unsafe Abortion (2008) an
% of unsafe abortions needing PAC	Adding it up methodology
% of unintended pregnancies that end in abortion	Sedgh et al. Intended and Unint

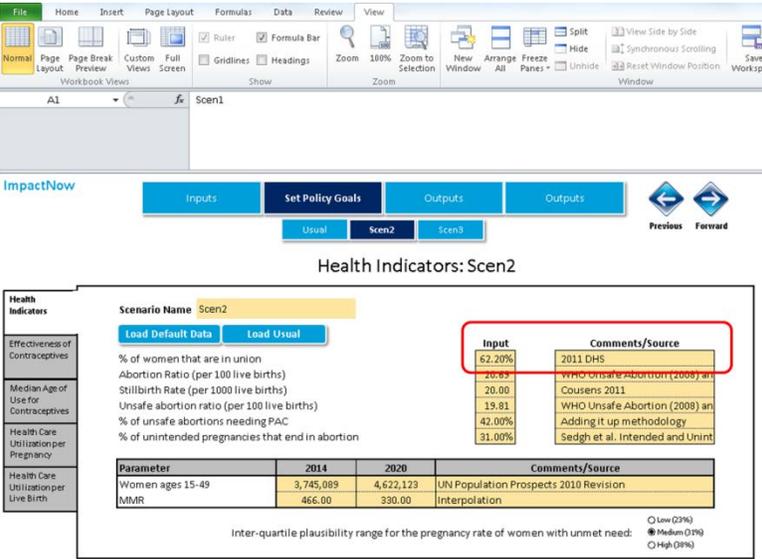
Parameter	2014	2020	Comments/Source
Women ages 15-49	3,745,089	4,622,123	UN Population Prospects 2010 Revision
MMR	466.00	330.00	Interpolation

Inter-quartile plausibility range for the pregnancy rate of women with unmet need:
 Low (D3%)
 Medium (D3%)
 High (D3%)

- Click on “Scen2” and find the “Load Usual” button. After clicking this button, a dialog box will appear. This box will alert you that all Scen2 inputs will now be updated to mirror the Usual scenario inputs.



- Your Scen2 inputs should now look like the image below, with the percentage of women that are in union updated to 62.2 percent. You may click on the “Health Care Utilization per Pregnancy” tab to see that the ANC figure has been updated as well.



- Next, click on “Scen3” and then click on either the “Load Usual” or “Load Scen2” button. These buttons provide you with the ability to load inputs from either of the first two scenarios. Since both scenarios now have the same inputs, you may select either button.

- Again, a dialog box will appear to alert you that all Scen3 inputs will be updated to mirror the inputs of either the Usual or Scen2 scenario.

The screenshot shows the ImpactNow software interface with a dialog box titled "Health Indicators: Scen3" open. The dialog box contains a question: "Are you sure you want to load from another scenario? All settings on this page will be replaced with the settings from the chosen scenario." Below the question are "Yes" and "No" buttons. The "Yes" button is highlighted with a red box. In the background, the software interface shows the "Inputs" tab selected, and the "Scenario Name" dropdown menu is set to "Scen3".

Health Indicators: Scen3

Microsoft Excel

Are you sure you want to load from another scenario? All settings on this page will be replaced with the settings from the chosen scenario.

Yes No

Scenario Name: Scen3

Load Default Data Load Usual Load Scen2

% of women that are in union
Abortion Ratio (per 100 live births)
Stillbirth Rate (per 1000 live births)
Unsafe abortion ratio (per 100 live births)
% of unsafe abortions needing PAC
% of unintended pregnancies that end in abortion

Parameter	2014	2020	Comments/Source
Women ages 15-49	3,745,089	4,622,123	UN Population Prospects 2010 Revision
MMR	466.00	330.00	Interpolation

Inter-quartile plausibility range for the pregnancy rate of women with unmet need:

Low (21%)
 Medium (21%)
 High (38%)

- At the end of this exercise, Usual, Scen2, and Scen3 should reflect the same inputs.
- Save the file by clicking "File" → "Save."

EXERCISE 3: SETTING POLICY GOALS

Objectives

The purpose of this exercise is to practice entering baseline data as well as inputs into three different policy scenarios:

- “Usual” scenario, which serves as a baseline against which the second and third scenarios are compared and represents a policy scenario of no additional increases in contraceptive use over current levels
- Scenario 2 (“Scen2”), representing an *ambitious* contraceptive use policy goal and visible increases in contraceptive use compared to the Usual scenario
- Scenario 3 (“Scen3”), representing the *most ambitious* contraceptive use policy goal and therefore the largest increases in contraceptive use over time

Task 3.1: Navigating to the “Set Policy Goals” pages

- Navigate away from the “Inputs” pages of ImpactNow by clicking Set Policy Goals in the navigation bar at the top of the “Configuration” page.



- You will see three pages in the Set Policy Goals section: 1) the main contraceptive prevalence rate (CPR) policy goal; 2) the method mix goal; and 3) FP costs. Ensure that you have navigated to the first page by clicking “CPR.”

	Unmet Need		CPR			
	Base 2014	Source / Comment	Base 2014	Usual 2020	Scen2 2020	Scen3 2020
CPR	24.05%	DHS 2011	31.85%	12.95%	12.95%	12.95%

Task 3.2: Entering new baseline figures

On the first tab in the **Set Policy Goals** section, you will see seven yellow input fields: five for data and two for base year sources. The first two fields correspond to unmet need in the base year.

- Adjust the baseline unmet need estimate by entering “12.8” in the 2014 yellow field corresponding to Unmet Need Base. Change the source information to “DHS 2010–2011.”



CPR Policy Goal - Unmet Need Yr1 and CPR

CPR	Unmet Need		CPR				
	Base 2014	Source/Comment	Base 2014	Source/Comment	Usual 2020	Scen2 2020	Scen3 2020
Method Mix	12.80%	DHS 2010-2011	31.85%	DHS 2009	12.95%	12.95%	12.95%

- Adjust the base-year contraceptive prevalence estimate by entering “58.5” in the corresponding 2014 yellow data field. Change the source information to “DHS 2010–2011.”



CPR Policy Goal - Unmet Need Yr1 and CPR

CPR	Unmet Need		CPR				
	Base 2014	Source/Comment	Base 2014	Source/Comment	Usual 2020	Scen2 2020	Scen3 2020
Method Mix	12.80%	DHS 2010-2011	58.50%	DHS 2010-2011	12.95%	12.95%	12.95%

Task 3.3: Entering inputs into the main CPR policy goal

The data inputs for the three policy scenarios—Usual, Scen2, and Scen3—are found next to the baseline input fields on the first tab of the **Set Policy Goals** section.

- First, set a CPR policy goal for Usual, representing a policy scenario of no additional increases in contraceptive use from the base year, by entering “58.5” in the corresponding yellow data field.



CPR Policy Goal - Unmet Need Yr1 and CPR

CPR	Unmet Need		CPR				
	Base 2014	Source/Comment	Base 2014	Source/Comment	Usual 2020	Scen2 2020	Scen3 2020
Method Mix	12.80%	DHS 2010-2011	58.50%	DHS 2010-2011	58.50%	12.95%	12.95%

- Set an *ambitious* contraceptive use policy goal for Scen2 by entering “64” in the corresponding 2020 yellow data field.

ImpactNOW

Configuration Inputs **Set Policy Goals** Outputs

Previous Forward

CPR Policy Goal - Unmet Need Yr1 and CPR

CPR	Unmet Need		CPR				
	Base 2014	Source/Comment	Base 2014	Source/Comment	Usual 2020	Scen2 2020	Scen3 2020
Method Mix	12.80%	DHS 2010-2011	58.50%	DHS 2010-2011	58.50%	64.00%	12.95%

- Finally, set the *most ambitious* contraceptive use policy goal for Scen3 by entering “74” in the corresponding 2020 yellow data field.

ImpactNOW

Configuration Inputs **Set Policy Goals** Outputs

Previous Forward

CPR Policy Goal - Unmet Need Yr1 and CPR

CPR	Unmet Need		CPR				
	Base 2014	Source/Comment	Base 2014	Source/Comment	Usual 2020	Scen2 2020	Scen3 2020
Method Mix	12.80%	DHS 2010-2011	58.50%	DHS 2010-2011	58.50%	64.00%	74.00%

Task 3.4: Entering inputs into the “Method Mix” policy goal

- Navigate away from the first tab of the **Set Policy Goals** section by clicking “Method Mix.” By doing this, you will see the method mix for the baseline year (“Base”) as well as the three policy scenarios (Usual, Scen2, and Scen3).
- Ensure the following distribution of contraceptive users by method in the Base case and corresponding yellow fields:
 - Male condom: 5.3%
 - Injectable: 14.2%
 - Pill: 70.6%
 - Male sterilization: 0%
 - Female sterilization: 1.9%
 - IUD: 0.3%
 - Implant: 4.6%
 - Standard Days Method: 0%
 - Other modern: 0.9%
 - All traditional: 2.2%
 - Other country-specific: Empty

The method mix should add up to 100 percent.

ImpactNOW

Configuration Inputs **Set Policy Goals** Outputs

Previous Forward

CPR Policy Goal - Method Mix

CPR	Method Mix	Base	Usual	Scen2	Scen3	Comments / Source
		2014	2020	2020	2020	
	Male condom	5.30%	8.13%	8.13%	8.13%	DHS 2011
	Injectable	14.20%	46.25%	46.25%	46.25%	DHS 2011
	Pill	70.60%	14.69%	14.69%	14.69%	DHS 2011
	Male sterilization	0.00%	0.00%	0.00%	0.00%	DHS 2011
	Female sterilization	1.90%	10.00%	10.00%	10.00%	DHS 2011
	IUD	0.30%	3.13%	3.13%	3.13%	DHS 2011
	Implant	4.60%	4.06%	4.06%	4.06%	DHS 2011
	Standard Days Method (SDM)	0.00%	0.00%	0.00%	0.00%	DHS 2011
	Other modern	0.90%	1.25%	1.25%	1.25%	DHS 2011
	All Traditional	2.20%	12.50%	12.50%	12.50%	DHS 2011
	Other country-specific					DHS 2011
	Total	100.00%	100.00%	100.00%	100.00%	

- For the Usual scenario, representing *no additional increases* in contraceptive use over the Base case, assume no changes to the method mix from the 2014 baseline. Replace all the data inputs with figures identical to the 2014 Base method mix as noted above. Ensure that the method mix adds up to 100 percent.

ImpactNOW

Configuration Inputs **Set Policy Goals** Outputs

Previous Forward

CPR Policy Goal - Method Mix

CPR	Method Mix	Base	Usual	Scen2	Scen3	Comments / Source
		2014	2020	2020	2020	
	Male condom	5.30%	5.30%	8.13%	8.13%	DHS 2011
	Injectable	14.20%	14.20%	46.25%	46.25%	DHS 2011
	Pill	70.60%	70.60%	14.69%	14.69%	DHS 2011
	Male sterilization	0.00%	0.00%	0.00%	0.00%	DHS 2011
	Female sterilization	1.90%	1.90%	10.00%	10.00%	DHS 2011
	IUD	0.30%	0.30%	3.13%	3.13%	DHS 2011
	Implant	4.60%	4.60%	4.06%	4.06%	DHS 2011
	Standard Days Method (SDM)	0.00%	0.00%	0.00%	0.00%	DHS 2011
	Other modern	0.90%	0.90%	1.25%	1.25%	DHS 2011
	All Traditional	2.20%	2.20%	12.50%	12.50%	DHS 2011
	Other country-specific					DHS 2011
	Total	100.00%	100.00%	100.00%	100.00%	

- For Scen2, the scenario representing an *ambitious* contraceptive use policy goal, replace all the data inputs with figures identical to the 2014 Base and Usual scenario method mix, except Injectable and Pill. For Injectable, replace the existing value with “28.40.” For Pill, change the data input to “56.40.” Ensure that the method mix adds up to 100 percent.

ImpactNOW



CPR Policy Goal - Method Mix

CPR		Base	Usual	Scen2	Scen3	Comments / Source
		2014	2020	2020	2020	
Method Mix	Male condom	5.30%	5.30%	5.30%	8.13%	DHS 2011
	Injectable	14.20%	14.20%	28.40%	16.25%	DHS 2011
	Pill	70.60%	70.60%	56.40%	14.69%	DHS 2011
FP Costs	Male sterilization	0.00%	0.00%	0.00%	0.00%	DHS 2011
	Female sterilization	1.90%	1.90%	1.90%	10.00%	DHS 2011
	IUD	0.30%	0.30%	0.30%	3.13%	DHS 2011
	Implant	4.60%	4.60%	4.60%	4.06%	DHS 2011
	Standard Days Method (SDM)	0.00%	0.00%	0.00%	0.00%	DHS 2011
	Other modern	0.90%	0.90%	0.90%	1.25%	DHS 2011
	All Traditional	2.20%	2.20%	2.20%	12.50%	DHS 2011
	Other country-specific					DHS 2011
	Total	100.00%	100.00%	100.00%	100.00%	

- For Scen3, the scenario representing the *most ambitious* contraceptive use policy goal, broaden the method mix, entering the following distribution of contraceptive users by method:
 - Male condom: 10%
 - Injectable: 15%
 - Pill: 30%
 - Male sterilization: 2%
 - Female sterilization: 2%
 - IUD: 30%
 - Implant: 7.9%
 - Standard Days Method: 0%
 - Other modern: 0.9%
 - All traditional: 2.2%
 - Other country-specific: Empty

- Ensure that the method mix adds up to 100 percent.

ImpactNOW

Configuration | Inputs | **Set Policy Goals** | Outputs



CPR Policy Goal - Method Mix

CPR		Base	Usual	Scen2	Scen3	Comments / Source
		2014	2020	2020	2020	
Method Mix	Male condom	5.30%	5.30%	5.30%	10.00%	DHS 2011
	Injectable	14.20%	14.20%	28.40%	15.00%	DHS 2011
	Pill	70.60%	70.60%	56.40%	30.00%	DHS 2011
FP Costs	Male sterilization	0.00%	0.00%	0.00%	2.00%	DHS 2011
	Female sterilization	1.90%	1.90%	1.90%	2.00%	DHS 2011
	IUD	0.30%	0.30%	0.30%	30.00%	DHS 2011
	Implant	4.60%	4.60%	4.60%	7.90%	DHS 2011
	Standard Days Method (SDM)	0.00%	0.00%	0.00%	0.00%	DHS 2011
	Other modern	0.90%	0.90%	0.90%	0.90%	DHS 2011
	All Traditional	2.20%	2.20%	2.20%	2.20%	DHS 2011
	Other country-specific					DHS 2011
	Total	100.00%	100.00%	100.00%	100.00%	

Task 3.4: Navigating to page three of the Set Policy Goals section

- In order to view the last set of policy inputs, navigate away from the second tab of the Set Policy Goals section by clicking “FP Costs.” By doing this, you will see the annual FP cost per user for each method of contraception. Do not change the default figures.

ImpactNOW

Configuration | Inputs | **Set Policy Goals** | Outputs



CPR Policy Goal - FP Costs

CPR	Cost (\$)	Comments / Source
Method Mix		
FP Costs	Male condom	4.15 Adding it up report (June 2012), Guttmacher institute
	Injectable	9.14 Adding it up report (June 2012), Guttmacher institute
	Pill	8.72 Adding it up report (June 2012), Guttmacher institute
	Male sterilization	1.59 Adding it up report (June 2012), Guttmacher institute
	Female sterilization	2.79 Adding it up report (June 2012), Guttmacher institute
	IUD	1.01 Adding it up report (June 2012), Guttmacher institute
	Implant	7.74 Adding it up report (June 2012), Guttmacher institute
	Standard Days Method (SDM)	0.00 Adding it up report (June 2012), Guttmacher institute
	Other modern	5.02 Adding it up report (June 2012), Guttmacher institute
	All Traditional	0.00 Adding it up report (June 2012), Guttmacher institute
Other country-specific	Adding it up report (June 2012), Guttmacher institute	

Save the file by clicking “File” → “Save”

EXERCISE 4: IMPACTNOW OUTPUT ANALYSIS

Objectives

The purpose of this exercise is to practice navigating to, selecting, managing, and interpreting the range of ImpactNow results in the **Outputs** section. Specifically, the user will learn how to

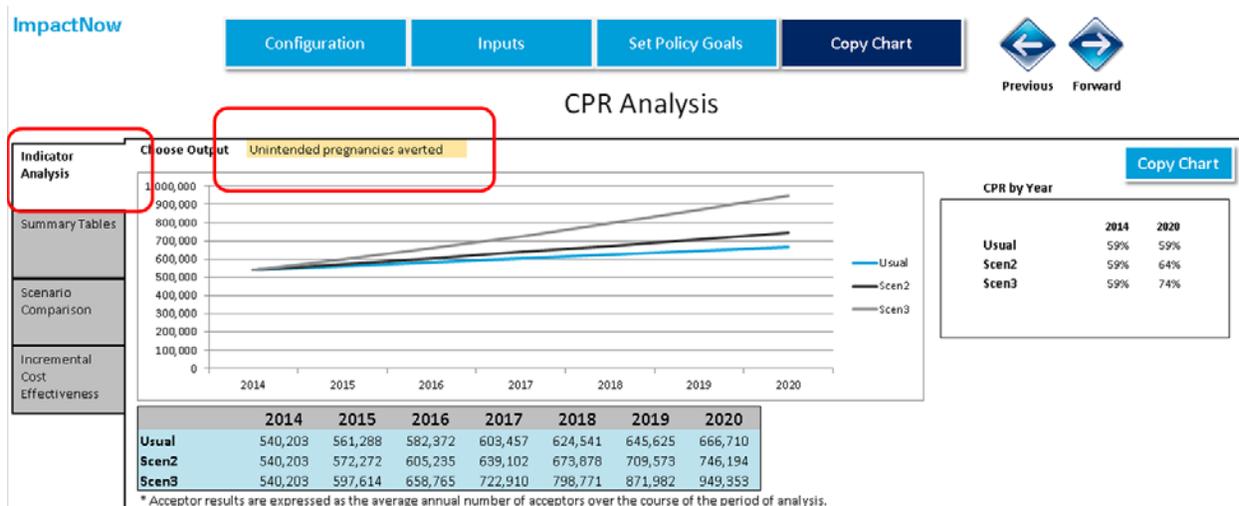
- Navigate throughout the **Outputs** section
- Select and display annual output values for indicators of interest both numerically and graphically by scenario, including “Unsafe Abortions Averted,” “Maternal and infant health care costs averted,” “Unintended pregnancies averted,” and “Infant deaths averted”
- Display and compare in-depth annual output summary tables by scenario
- Display in-depth comparison tables, which evaluate cumulative rather than annual values of each indicator output across the three scenarios
- Interpret the incremental cost-effectiveness ratio for select indicators

Task 4.1: Navigating to the Outputs pages

- Navigate away from the **Set Policy Goals** section by clicking “Outputs” in the navigation bar.



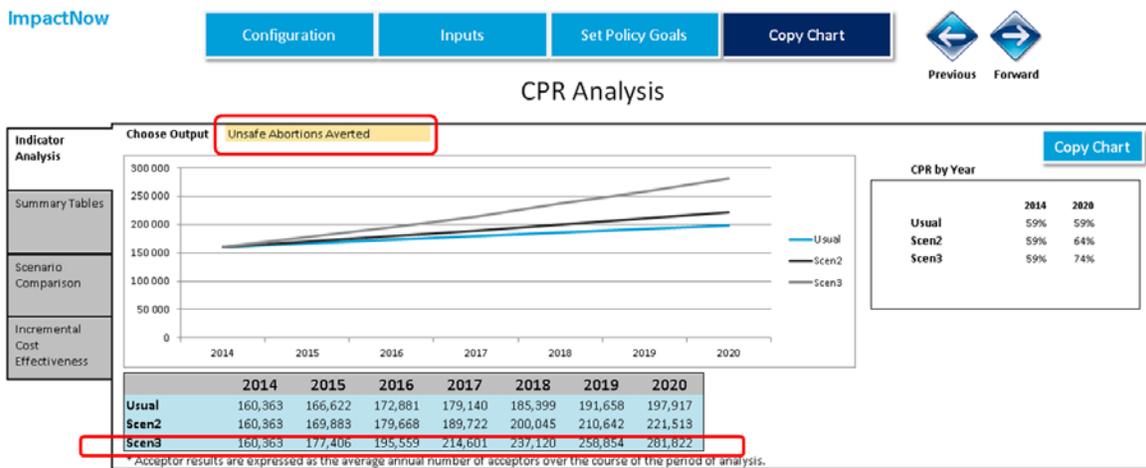
- You will see four pages in the **Outputs** section: 1) “Indicator Analysis,” 2) “Summary Tables,” 3) “Scenario Comparison,” and 4) “Incremental Cost Effectiveness.” Ensure that you have navigated to the first tab by clicking “Indicator Analysis.”



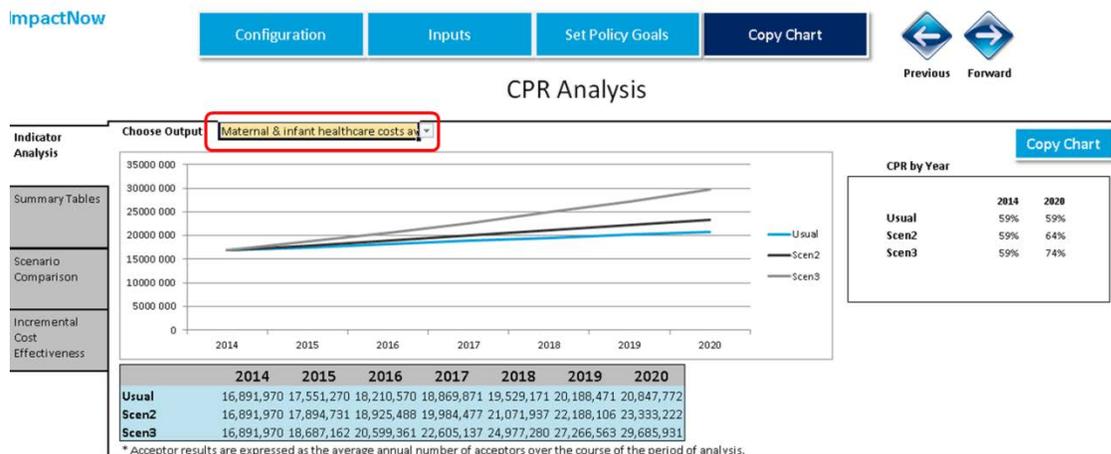
Task 4.2: Selecting, viewing, and interpreting output indicators of interest

Once you have navigated to the “Indicator Analysis” tab, you can select an indicator of interest from the yellow drop-down menu above the graph. The results for all three policy scenarios—Usual, Scen2, and Scen3—are then graphed, and annual values for each scenario are displayed in the table format. Each scenario represents varied levels of ambition related to FP policy and maternal health.

- In the yellow drop-down menu titled, Choose Output, select the indicator “Unsafe Abortions Averted.” This allows you to view the number of abortions averted annually by policy scenario. The graph and corresponding table show that Scen3, the *most ambitious* contraceptive use policy goal, averts the most unsafe abortions annually compared to the other policy scenarios.



- To view another output indicator, select “Maternal & infant health care costs averted” from the yellow drop-down menu. The graph and corresponding table show that Scen3, the *most ambitious* contraceptive use policy goal, generates the most annual savings across development sectors compared the Usual scenario and Scen2.



- Next, select “Unintended pregnancies averted” from the yellow drop-down menu. Below, note the number of unintended pregnancies averted by scenario in 2020:
 - Usual: _____
 - Scen2: _____
 - Scen3: _____
 - Which scenario averted the most unintended pregnancies in 2020?

Answers found at the end of this exercise.ⁱ

- Finally, select “Child deaths averted” from the yellow drop-down menu. Below, note the number of child deaths prevented by scenario in 2020:
 - Usual: _____
 - Scen2: _____
 - Scen3: _____
 - Which scenario prevented the most infant deaths in 2020?

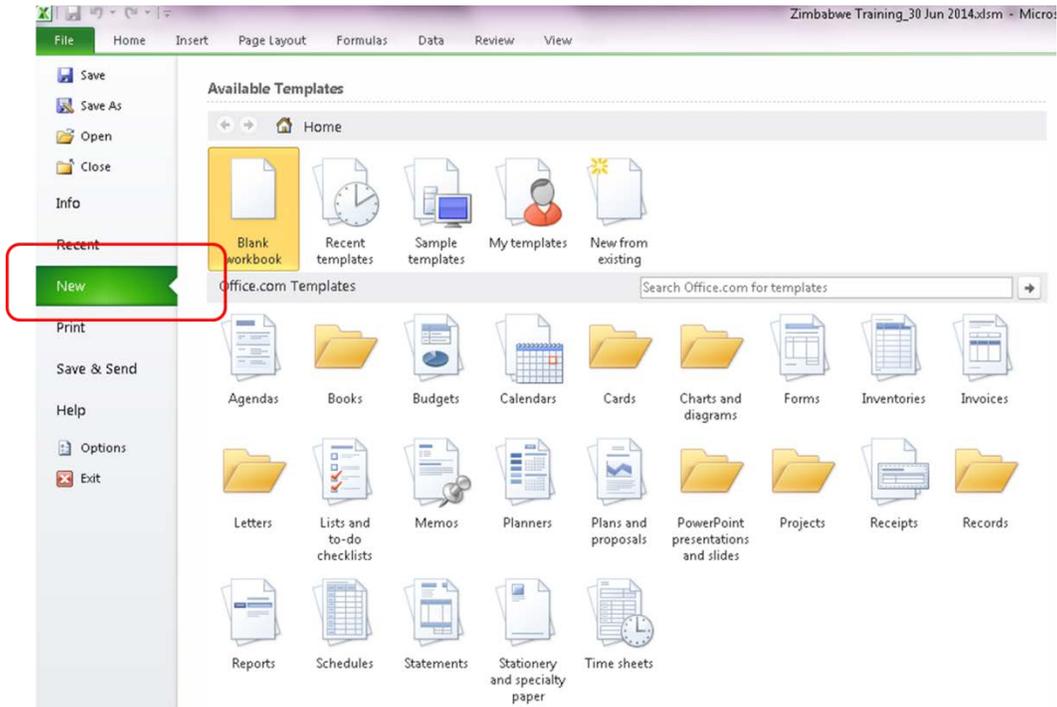
Answers found at the end of this exercise.ⁱⁱ

Task 4.3: Viewing and copying/pasting summary table results

- Navigate to the second tab of the **Outputs** section by clicking “Summary Tables.” You will see one table for each scenario; each table provides the annual values for all outputs previously displayed on the “Indicator Analysis” tab. This tab displays all results in one location.

Indicator	2014	2015	2016	2017	2018	2019	2020
Unintended pregnancies averted	540,203	561,288	582,372	603,457	624,541	645,625	666,710
Births averted	235,124	306,642	318,161	323,680	341,159	352,717	364,236
Abortions Averted	167,463	173,999	180,535	187,072	193,608	200,144	206,680
Unsafe Abortions Averted	160,363	166,622	172,881	179,140	185,399	191,658	197,917
Maternal deaths averted	1,902	1,880	1,851	1,815	1,771	1,720	1,662
Child deaths averted	5,954	6,186	6,419	6,651	6,883	7,116	7,348
DALYs averted	628,733	646,339	664,669	681,922	698,701	715,003	730,829
Maternal & infant healthcare costs	16,891,970	17,551,270	18,210,570	18,869,871	19,529,171	20,188,471	20,847,772
Unmet Need	12.80%	12.80%	12.80%	12.80%	12.80%	12.80%	12.80%
Total FP costs	17,814,920	18,510,243	19,205,567	19,900,890	20,596,214	21,291,537	21,986,861
Cost-benefit ratio	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Total users	2,130,877	2,276,388	2,361,639	2,447,410	2,532,920	2,618,431	2,703,942
Condom users	116,116	120,649	125,181	129,713	134,245	138,777	143,309
Injectable users	311,105	323,247	335,390	347,532	359,675	371,817	383,960
Pill users	1,546,759	1,607,130	1,667,500	1,727,871	1,788,242	1,848,612	1,908,983
Male sterilization users	0	0	0	0	0	0	0
Female sterilization users	41,627	43,251	44,876	46,501	48,125	49,750	51,375
IUD users	6,573	6,829	7,086	7,342	7,599	7,855	8,112
Implant users	100,780	104,714	108,647	112,581	116,514	120,448	124,381
Standard Days Method (SDM) user:	0	0	0	0	0	0	0
Other modern users	19,718	20,487	21,257	22,027	22,796	23,566	24,335
All traditional users	48,199	50,081	51,962	53,843	55,724	57,605	59,487
Male sterilization acceptors *	0	0	0	0	0	0	0
Female sterilization acceptors *	9,891	9,891	9,891	9,891	9,891	9,891	9,891
IUD acceptors *	1,652	1,652	1,652	1,652	1,652	1,652	1,652
Implant acceptors *	32,213	32,213	32,213	32,213	32,213	32,213	32,213
SDM acceptors *	0	0	0	0	0	0	0

- To conduct your own data analysis with these tables in a separate file, open a new blank workbook in Excel.



- After opening the new workbook, switch back to the ImpactNow file, scrolling to Scen3 on the “Summary Tables” tab. Select the full table and click “Copy.”

The screenshot shows the ImpactNow software interface. The 'Copy' button in the ribbon is highlighted with a red box. Below the ribbon, a table of data is displayed, with the entire table circled in red. The table is titled 'Scen3' and contains data for various indicators from 2014 to 2020. The indicators include 'All traditional users', 'Male sterilization acceptors', 'Female sterilization acceptors', 'IUD acceptors', 'Implant acceptors', 'SDM acceptors', and a large section for 'Scen3' which includes 'Unintended pregnancies averted', 'Births averted', 'Abortions Averted', 'Unsafe Abortions Averted', 'Maternal deaths averted', 'Child deaths averted', 'DALYs averted', 'Maternal & infant healthcare costs', 'Unmet Need', 'Total FP costs', 'Cost-benefit ratio', 'Total users', 'Condom users', 'Injectable users', 'Pill users', 'Male sterilization users', 'Female sterilization users', 'IUD users', 'Implant users', 'Standard Days Method (SDM) user', and 'Other modern users'. The table also includes a summary of 'All traditional users' and 'SDM acceptors' at the bottom.

Indicator	2014	2015	2016	2017	2018	2019	2020
All traditional users	48,199	50,865	53,530	56,374	59,217	62,119	65,079
Male sterilization acceptors *	0	0	0	0	0	0	0
Female sterilization acceptors *	12,179	12,179	12,179	12,179	12,179	12,179	12,179
IUD acceptors *	1,809	1,809	1,809	1,809	1,809	1,809	1,809
Implant acceptors *	34,582	34,582	34,582	34,582	34,582	34,582	34,582
SDM acceptors *	0	0	0	0	0	0	0
Scen3							
Unintended pregnancies averted	540,203	597,614	658,765	722,910	798,771	871,982	949,353
Births averted	235,124	326,488	359,896	394,940	436,384	476,380	518,650
Abortions Averted	167,463	185,260	204,217	224,102	247,619	270,314	294,235
Unsafe Abortions Averted	160,363	177,406	195,559	214,601	237,120	258,854	281,822
Maternal deaths averted	1,902	2,002	2,094	2,174	2,265	2,323	2,367
Child deaths averted	5,954	6,587	7,261	7,968	8,804	9,611	10,463
DALYs averted	628,733	688,808	751,857	816,908	893,619	965,683	1,040,655
Maternal & infant healthcare costs	16,891,970	18,687,162	20,599,361	22,605,137	24,977,280	27,266,563	29,685,931
Unmet Need	12.80%	10.22%	7.63%	5.05%	2.47%	-0.12%	-2.70%
Total FP costs	17,814,920	18,265,100	18,603,613	18,820,329	18,905,122	18,847,863	18,638,423
Cost-benefit ratio	0.95	1.02	1.11	1.20	1.32	1.45	1.59
Total users	2,190,877	2,376,912	2,570,499	2,771,639	2,980,331	3,196,575	3,420,371
Condom users	116,116	144,535	176,508	212,030	251,341	294,618	342,037
Injectable users	311,105	340,691	371,866	404,659	439,102	475,224	513,056
Pill users	1,546,759	1,517,262	1,466,898	1,394,134	1,297,437	1,175,274	1,026,111
Male sterilization users	0	7,923	17,137	27,716	39,738	53,276	68,407
Female sterilization users	41,627	45,557	49,696	54,047	58,613	63,399	68,407
IUD users	6,573	124,788	262,191	419,903	599,046	800,742	1,026,111
Implant users	100,780	122,411	146,518	173,227	202,662	234,948	270,209
Standard Days Method (SDM) user:	0	0	0	0	0	0	0
Other modern users	19,718	21,392	23,134	24,945	26,823	28,769	30,783
All traditional users	48,199	52,292	56,551	60,976	65,567	70,325	75,246
Male sterilization acceptors *	9,842	9,842	9,842	9,842	9,842	9,842	9,842
Female sterilization acceptors *	17,868	17,868	17,868	17,868	17,868	17,868	17,868
IUD acceptors *	206,970	206,970	206,970	206,970	206,970	206,970	206,970
Implant acceptors *	61,139	61,139	61,139	61,139	61,139	61,139	61,139
SDM acceptors *	0	0	0	0	0	0	0

* Acceptor results are expressed as the average annual number of acceptors over the course of the period of analysis.

- Switch back to your new Excel workbook. Select cell A1 and click “Paste Values.”

	A	B	C	D	E	F	G	H	I
1	Indicator	2014	2015	2016	2017	2018	2019	2020	
2	Unintend	540203.5	597613.5	658765.5	722910	798770.9	871981.9	949353	
3	Births ave	295123.5	326487.8	359896.2	394939.6	436383.9	476380.5	518649.8	
4	Abortions	167463.1	185260.2	204217.3	224102.1	247619	270314.4	294299.4	
5	Unsafe Ab	160363	177405.5	195558.9	214600.6	237120.4	258853.6	281821.7	
6	Maternal r	1901.961	2001.752	2093.773	2173.848	2265.18	2323.469	2367.056	
7	Child deat	5953.86	6586.606	7260.592	7967.562	8803.664	9610.56	10463.31	
8	DALYs ave	628733	688807.6	751857.1	816908.2	893619.1	965683.3	1040655	
9	Maternal r	16891970	18687162	20599361	22605137	24977280	27266563	29685931	
10	Unmet Ne	0.128	0.102167	0.076333	0.0505	0.024667	-0.00117	-0.027	
11	Total FP c	17814920	18265100	18603613	18820329	18905122	18847863	18638423	
12	Cost-bene	0.948192	1.023108	1.107277	1.201102	1.321191	1.446666	1.592728	
13	Total user	2190877	2376912	2570499	2771639	2980331	3196575	3420371	
14	Condom u	116116.5	144595.5	176507.6	212030.4	251341.2	294617.6	342037.1	
15	Injectable	311104.5	340690.7	371865.6	404659.3	439102.1	475224.1	513055.7	
16	Pill users	1546759	1517262	1466898	1394134	1297437	1175274	1026111	
17	Male steri	0	7923.04	17136.66	27716.39	39737.74	53276.25	68407.42	
18	Female st	41626.66	45557.48	49696.32	54046.96	58613.17	63398.73	68407.42	
19	IUD users	6572.631	124787.9	262190.9	419903.3	599046.5	800742	1026111	
20	Implant u:	100780.3	122411	146518.5	173227.4	202662.5	234948.2	270209.3	
21	Standard I	0	0	0	0	0	0	0	
22	Other mo	19717.89	21392.21	23134.49	24944.75	26822.98	28769.17	30783.34	
23	All traditi	48199.3	52292.07	56550.99	60976.06	65567.28	70324.64	75248.16	
24	Male steri	9842.257	9842.257	9842.257	9842.257	9842.257	9842.257	9842.257	
25	Female st	17868.25	17868.25	17868.25	17868.25	17868.25	17868.25	17868.25	
26	IUD accep	206969.8	206969.8	206969.8	206969.8	206969.8	206969.8	206969.8	
27	Implant ac	61138.93	61138.93	61138.93	61138.93	61138.93	61138.93	61138.93	
28	SDM accep	0	0	0	0	0	0	0	
29									
30									

- Once your data are pasted, you can use Excel to create your own column, line, pie, bar, area, and other charts. You can also conduct additional analysis using your preferred Excel tools and functions. Keep this file open for a forthcoming task.

Task 4.4: Viewing and copying/pasting scenario comparison tables

- From the “Summary Tables” tab, navigate to “Scenario Comparison.” This tab displays a table, which provides a comparison of the cumulative rather than annual values of each indicator output across the three scenarios.²

Indicator Analysis	Indicator	Usual	Scen2	Scen3	Incremental difference compared to Usual		Percentage difference compared to Usual	
					Scen2	Scen3	Scen2	Scen3
Summary Tables	Unintended pregnancies averted	4,224,196	4,486,458	5,139,598	262,262	915,402	6%	22%
	Births averted	2,307,759	2,451,038	2,807,861	143,279	500,102	6%	22%
	Abortions Averted	1,309,501	1,390,802	1,593,275	81,301	283,775	6%	22%
Scenario Comparison	Unsafe Abortions Averted	1,253,980	1,331,835	1,525,724	77,854	271,743	6%	22%
	Maternal deaths averted	12,601	13,327	15,127	725	2,526	6%	20%
	Child deaths averted	46,557	49,448	56,646	2,891	10,089	6%	22%
	DALYs averted	4,766,795	5,058,973	5,786,264	292,178	1,019,468	6%	21%
Incremental Cost Effectiveness	Maternal & infant healthcare costs averted	132,089,095	140,289,931	160,713,404	8,200,836	28,624,309	6%	22%
	Unmet Need	12.80%	10.05%	5.05%	(0)	(0)	-21%	-61%
	Total FP costs	139,306,231	146,731,483	129,895,369	7,425,252	(9,410,862)	5%	-7%
	Cost-benefit ratio	1	1	1	0	0	1%	30%
	Total user-years	17,131,867	17,974,728	19,507,204	842,862	2,375,338	5%	14%
	Condom user-years	907,989	952,661	1,537,246	44,672	629,257	5%	69%
	Injectable user-years	2,432,725	3,913,359	2,855,702	1,480,634	422,977	61%	17%
	Pill user-years	12,095,098	11,329,210	9,423,877	(765,887)	(2,671,221)	-6%	-22%
	Male sterilization user-years	0	0	214,198	-	214,198	-	-
	Female sterilization user-years	325,505	341,520	381,347	16,014	55,841	5%	17%
	IUD user-years	51,396	53,924	3,239,355	2,529	3,187,959	5%	6203%
	Implant user-years	788,066	826,838	1,250,757	38,772	462,691	5%	59%
	Standard Days Method (SDM) user-years	0	0	0	-	-	-	-
	Other modern user-years	154,187	161,773	175,565	7,586	21,378	5%	14%
	All traditional user-years	376,901	395,444	429,158	18,543	52,257	5%	14%
	Male sterilization acceptors *	0	0	68,896	-	68,896	-	-
	Female sterilization acceptors *	69,236	85,251	125,078	16,014	55,841	23%	81%
	IUD acceptors *	11,561	12,663	1,448,788	1,102	1,437,227	10%	12432%
	Implant acceptors *	225,493	242,073	427,973	16,579	202,479	7%	90%
	SDM acceptors *	0	0	0	-	-	-	-

* Acceptor results are expressed as the average annual number of acceptors over the course of the period of analysis.

- View the first three columns of the table, which report the cumulative values for each output. Select the column marked Scen3 and click “Copy.”

Indicator Analysis	Indicator	Usual	Scen2	Scen3	Incremental difference compared to Usual		Percentage difference compared to Usual	
					Scen2	Scen3	Scen2	Scen3
Summary Tables	Unintended pregnancies averted	4,224,196	4,486,458	5,139,598	262,262	915,402	6%	22%
	Births averted	2,307,759	2,451,038	2,807,861	143,279	500,102	6%	22%
	Abortions Averted	1,309,501	1,390,802	1,593,275	81,301	283,775	6%	22%
Scenario Comparison	Unsafe Abortions Averted	1,253,980	1,331,835	1,525,724	77,854	271,743	6%	22%
	Maternal deaths averted	12,601	13,327	15,127	725	2,526	6%	20%
	Child deaths averted	46,557	49,448	56,646	2,891	10,089	6%	22%
	DALYs averted	4,766,795	5,058,973	5,786,264	292,178	1,019,468	6%	21%
Incremental Cost Effectiveness	Maternal & infant healthcare costs averted	132,089,095	140,289,931	160,713,404	8,200,836	28,624,309	6%	22%
	Unmet Need	12.80%	10.05%	5.05%	(0)	(0)	-21%	-61%
	Total FP costs	139,306,231	146,731,483	129,895,369	7,425,252	(9,410,862)	5%	-7%
	Cost-benefit ratio	1	1	1	0	0	1%	30%
	Total user-years	17,131,867	17,974,728	19,507,204	842,862	2,375,338	5%	14%
	Condom user-years	907,989	952,661	1,537,246	44,672	629,257	5%	69%
	Injectable user-years	2,432,725	3,913,359	2,855,702	1,480,634	422,977	61%	17%
	Pill user-years	12,095,098	11,329,210	9,423,877	(765,887)	(2,671,221)	-6%	-22%
	Male sterilization user-years	0	0	214,198	-	214,198	-	-
	Female sterilization user-years	325,505	341,520	381,347	16,014	55,841	5%	17%
	IUD user-years	51,396	53,924	3,239,355	2,529	3,187,959	5%	6203%
	Implant user-years	788,066	826,838	1,250,757	38,772	462,691	5%	59%
	Standard Days Method (SDM) user-years	0	0	0	-	-	-	-
	Other modern user-years	154,187	161,773	175,565	7,586	21,378	5%	14%
	All traditional user-years	376,901	395,444	429,158	18,543	52,257	5%	14%
	Male sterilization acceptors *	0	0	68,896	-	68,896	-	-
	Female sterilization acceptors *	69,236	85,251	125,078	16,014	55,841	23%	81%
	IUD acceptors *	11,561	12,663	1,448,788	1,102	1,437,227	10%	12432%
	Implant acceptors *	225,493	242,073	427,973	16,579	202,479	7%	90%
	SDM acceptors *	0	0	0	-	-	-	-

* Acceptor results are expressed as the average annual number of acceptors over the course of the period of analysis.

² For each output (except the cost-benefit ratio), the values compared here are the cumulative values for the entire time period; that is, the sum of all the annual values. The cost-benefit ratio compared here is the average across all years.

- Switch back to your new Excel workbook and complete the following steps:
 - Select cell J2 and click “Paste Values.” Now the Scen3 annual and cumulative values are both on one sheet.
 - In cell J1, type “Cumulative Values Scen3” to name the column.
 - In cell K1, type “Cumulative Values Check.”
 - In cell K2, enter the formula “=sum(B2:H2)” and hit enter. Compare whether this value matches the value in J2.

	A	B	C	D	E	F	G	H	I	J	K
1	Indicator	2014	2015	2016	2017	2018	2019	2020		Cumulative Values Scen3	Cumulative Values Check
2	Unintended pregnancies averted	540203	597614	658765	722910	798771	871982	949353		5139598.25	5139598.25
3	Births averted	295124	326488	359896	394940	436384	476380	518650		2807861.24	
4	Abortions Averted	167463	185260	204217	224102	247619	270314	294299		1593275.458	
5	Unsafe Abortions Averted	160363	177406	195559	214601	237120	258854	281822		1525723.762	
6	Maternal deaths averted	1901.96	2001.75	2093.77	2173.85	2265.18	2323.47	2367.06		15127.03905	
7	Child deaths averted	5953.86	6586.61	7260.59	7967.56	8803.66	9610.56	10463.3		56646.14977	
8	DALYs averted	628733	688808	751857	816908	893619	965683	1040655		5786263.652	
9	Maternal & infant healthcare cost:	1.7E+07	1.9E+07	2.1E+07	2.3E+07	2.5E+07	2.7E+07	3E+07		160713404	
10	Unmet Need	0.128	0.10217	0.07633	0.0505	0.02467	-0.00117	-0.027		0.0505	
11	Total FP costs	1.8E+07	1.8E+07	1.9E+07	1.9E+07	1.9E+07	1.9E+07	1.9E+07		129895369	
12	Cost-benefit ratio	0.94819	1.02311	1.10728	1.2011	1.32119	1.44667	1.59273		1.23432347	
13	Total users	2190877	2376912	2570499	2771639	2980331	3196575	3420371		19507204.15	
14	Condom users	116116	144595	176508	212030	251341	294618	342037		1537245.952	
15	Injectable users	311105	340691	371866	404659	439102	475224	513056		2855701.99	
16	Pill users	1546759	1517262	1466898	1394134	1297437	1175274	1026111		9423876.817	
17	Male sterilization users	0	7923.04	17136.7	27716.4	39737.7	53276.2	68407.4		214197.503	
18	Female sterilization users	41626.7	45557.5	49696.3	54047	58613.2	63398.7	68407.4		381346.7539	
19	IUD users	6572.63	124788	262191	419903	599046	800742	1026111		3239354.532	
20	Implant users	100780	122411	146518	173227	202662	234948	270209		1250757.271	
21	Standard Days Method (SDM) user	0	0	0	0	0	0	0		0	
22	Other modern users	19717.9	21392.2	23134.5	24944.8	26823	28769.2	30783.3		175564.8373	
23	All traditional users	48199.3	52292.1	56551	60976.1	65567.3	70324.6	75248.2		429158.4912	
24	Male sterilization acceptors *	9842.26	9842.26	9842.26	9842.26	9842.26	9842.26	9842.26		68895.80087	
25	Female sterilization acceptors *	17868.2	17868.2	17868.2	17868.2	17868.2	17868.2	17868.2		125077.7489	
26	IUD acceptors *	206970	206970	206970	206970	206970	206970	206970		1448788.447	
27	Implant acceptors *	61138.9	61138.9	61138.9	61138.9	61138.9	61138.9	61138.9		427972.5215	
28	SDM acceptors *	0	0	0	0	0	0	0		0	

- Switch back to the ImpactNow file. View the second part of the “Scenario Comparison” table, columns four and five. These columns compare Scen2 and Scen3 to the Usual case, or the baseline scenario.

ImpactNow

Configuration Inputs Set Policy Goals **Outputs** Previous Forward

CPR Analysis

Indicator Analysis	Indicator	Usual	Scen2	Scen3	Incremental difference compared to Usual		Percentage difference compared to Usual	
					Scen2	Scen3	Scen2	Scen3
Summary Tables	Unintended pregnancies averted	4,224,196	4,486,458	5,139,598	262,262	915,402	6%	22%
	Births averted	2,307,759	2,451,038	2,807,861	143,279	500,102	6%	22%
	Abortions Averted	1,309,501	1,390,802	1,593,275	81,301	283,775	6%	22%
Scenario Comparison	Unsafe Abortions Averted	1,253,980	1,331,835	1,525,724	77,854	271,743	6%	22%
	Maternal deaths averted	12,601	13,327	15,127	725	2,526	6%	20%
	Child deaths averted	46,557	49,448	56,644	2,891	10,089	6%	22%
	DALYs averted	4,766,795	5,058,973	5,786,266	292,178	1,019,468	6%	21%
	Maternal & infant healthcare costs averted	132,089,095	140,289,931	160,713,404	8,200,836	28,624,309	6%	22%
Incremental Cost Effectiveness	Unmet Need	12.80%	10.05%	5.05%	(0)	(0)	-21%	-61%
	Total FP costs	139,306,231	146,731,483	129,895,363	7,425,252	(9,410,862)	5%	-7%
	Cost-benefit ratio	1	1	1	0	0	1%	30%
	Total user-years	17,131,867	17,974,728	19,507,204	842,862	2,375,338	5%	14%
	Condom user-years	907,989	952,661	1,537,244	44,672	629,257	5%	69%
	Injectable user-years	2,432,725	3,913,359	2,855,701	1,480,634	422,977	61%	17%
	Pill user-years	12,095,098	11,329,210	9,423,871	(765,887)	(2,671,221)	-6%	-22%
	Male sterilization user-years	0	0	214,198	-	214,198	-	-
	Female sterilization user-years	325,505	341,520	381,341	16,014	55,841	5%	17%
	IUD user-years	51,396	53,924	3,239,959	2,529	3,187,959	5%	6203%
	Implant user-years	788,066	826,838	1,250,751	38,772	462,691	5%	59%
	Standard Days Method (SDM) user-years	0	0	0	-	-	-	-
	Other modern user-years	154,187	161,773	175,565	7,586	21,378	5%	14%
	All traditional user-years	376,901	395,444	429,153	18,543	52,257	5%	14%
	Male sterilization acceptors *	0	0	68,896	-	68,896	-	-
	Female sterilization acceptors *	69,236	85,251	125,078	16,014	55,841	23%	81%
	IUD acceptors *	11,561	12,663	1,448,788	1,102	1,437,227	10%	12432%
	Implant acceptors *	225,493	242,073	427,971	16,579	202,479	7%	90%
	SDM acceptors *	0	0	0	-	-	-	-

* Acceptor results are expressed as the average annual number of acceptors over the course of the period of analysis.

- Finally, view the third part of the table, columns six and seven. This part of the table states the comparison as a percentage of the Usual scenario value; this has the benefit of expressing the size of the difference in outputs relative to the absolute level of output.

ImpactNow

Configuration Inputs Set Policy Goals **Outputs** Previous Forward

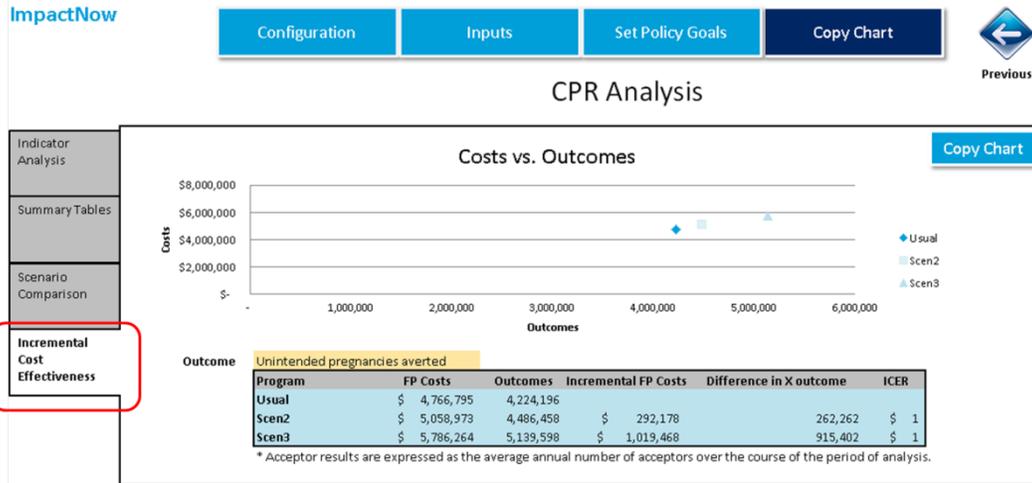
CPR Analysis

Indicator Analysis	Indicator	Usual	Scen2	Scen3	Incremental difference compared to Usual		Percentage difference compared to Usual	
					Scen2	Scen3	Scen2	Scen3
Summary Tables	Unintended pregnancies averted	4,224,196	4,486,458	5,139,598	262,262	915,402	6%	22%
	Births averted	2,307,759	2,451,038	2,807,861	143,279	500,102	6%	22%
	Abortions Averted	1,309,501	1,390,802	1,593,275	81,301	283,775	6%	22%
Scenario Comparison	Unsafe Abortions Averted	1,253,980	1,331,835	1,525,724	77,854	271,743	6%	22%
	Maternal deaths averted	12,601	13,327	15,127	725	2,526	6%	20%
	Child deaths averted	46,557	49,448	56,646	2,891	10,089	6%	22%
	DALYs averted	4,766,795	5,058,973	5,786,264	292,178	1,019,468	6%	21%
Incremental Cost Effectiveness	Maternal & infant healthcare costs averted	132,089,095	140,289,931	160,713,404	8,200,836	28,624,309	6%	22%
	Unmet Need	12.80%	10.05%	5.05%	(0)	(0)	-21%	-61%
	Total FP costs	139,306,231	146,731,483	129,895,369	7,425,252	(9,410,862)	5%	-7%
	Cost-benefit ratio	1	1	1	0	0	1%	30%
	Total user-years	17,131,867	17,974,728	19,507,204	842,862	2,375,338	5%	14%
	Condom user-years	907,989	952,661	1,537,246	44,672	629,257	5%	69%
	Injectable user-years	2,432,725	3,913,359	2,855,702	1,480,634	422,977	61%	17%
	Pill user-years	12,095,098	11,329,210	9,423,877	(765,887)	(2,671,221)	-6%	-22%
	Male sterilization user-years	0	0	214,198	-	214,198	-	-
	Female sterilization user-years	325,505	341,520	381,347	16,014	55,841	5%	17%
	IUD user-years	51,396	53,924	3,239,355	2,529	3,187,959	5%	6203%
	Implant user-years	788,066	826,838	1,250,757	38,772	462,691	5%	59%
	Standard Days Method (SDM) user-years	0	0	0	-	-	-	-
	Other modern user-years	154,187	161,773	175,565	7,586	21,378	5%	14%
	All traditional user-years	376,901	395,444	429,158	18,543	52,257	5%	14%
	Male sterilization acceptors *	0	0	68,896	-	68,896	-	-
	Female sterilization acceptors *	69,236	85,251	125,078	16,014	55,841	23%	81%
	IUD acceptors *	11,561	12,663	1,448,788	1,102	1,437,227	10%	12432%
	Implant acceptors *	225,493	242,073	427,973	16,579	202,479	7%	90%
	SDM acceptors *	0	0	0	-	-	-	-

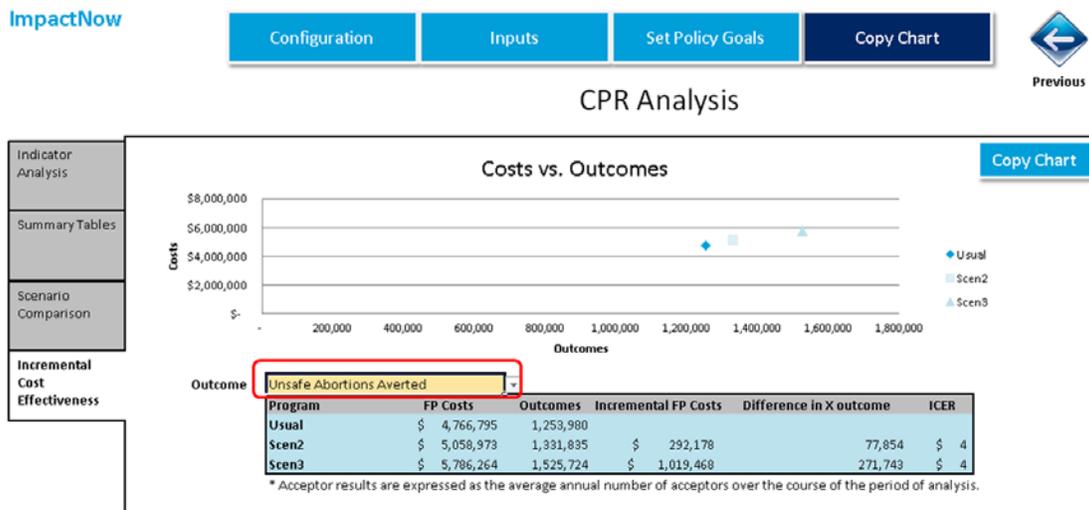
* Acceptors results are expressed as the average annual number of acceptors over the course of the period of analysis.

Task 4.5: Navigating to, selecting, and interpreting the incremental cost-effectiveness ratio

- From “Scenario Comparison,” navigate to the fourth and final tab, “Incremental Cost Effectiveness.”



- Like the “Indicator Analysis” tab, this one analyzes one indicator at a time. Select “Unsafe Abortions Averted” from the yellow drop-down menu. The graph displays the FP costs, while the table includes additional information, including the incremental cost-effectiveness ratio (ICER). The ICER tells us the amount of additional funds that must be invested in family planning to achieve one more of the selected outcomes.



- In the “Unsafe Abortions Averted” example, the ICER tells us that setting an ambitious contraceptive policy goal—one that aspires to increase contraceptive prevalence and decrease maternal deaths, as per Scen3—could avert one unsafe abortion for each US\$4 invested in family planning.
- Next, select “Child Deaths Averted” from the yellow drop-down menu. Please interpret the following ICER:

- The ICER tells us that by making an ambitious policy goal, one that aspires to increase contraceptive prevalence and decrease maternal deaths by 2020, we could

*Answers found at the end of this exercise.*ⁱⁱⁱ

i. Task 4.2, Answers:

- Usual = 666,710
- Scen2 = 746,194
- Scen3 = 949,353
- Which scenario averted the most unintended pregnancies in 2020? **Answer:** Scen3

ii. Task 4.2, Answers:

- Usual = 7,348
- Scen2 = 8,224
- Scen3 = 10,463
- Which scenario prevented the most infant deaths in 2020? **Answer:** Scen3

iii. Task 4.5, Answer:

The ICER tells us that by setting an ambitious policy goal, one that aspires to increase contraceptive prevalence and decrease maternal deaths by 2020, we could avert one infant death for each US\$101 invested in family planning.

GROUP EXERCISE

Instructions: Please review the following narrative with your group. Use the details below to build an appropriate ImpactNow application. After completing the projection, use the paper and markers provided to visualize the outputs in a way that is effective for advocacy.

Narrative #1

The first lady of Benin has announced a new five-year Safe Childhood Initiative with the goal of reducing preventable child deaths. This movement has garnered national attention and the government has made new funding available for programs that reduce child deaths. You are a program manager for an FP service delivery nongovernmental organization and would like to make the case that family planning can contribute to safe childhood. Being a conscientious FP advocate, you also want to advocate for provision of modern contraceptive methods by the government. Please use ImpactNow to demonstrate the benefits of increasing the contraceptive prevalence rate in Benin to 25 percent by 2018. Create multiple scenarios to explore different ways of achieving this goal. Identify at least one country-specific source for demographic data and use this source in your projection.

Narrative #2

Uganda's Minister of Health is concerned about the extremely high rate of population growth in his country. Unsurprisingly, the country also has very high unmet need for family planning. As an officer within the Reproductive Health Unit of the Ministry of Health, the minister would like you to estimate the total FP program resources that would be necessary to cut unmet need by half. The minister would also like you to estimate the difference in resource requirements if the country diversified its method mix to include more long-acting methods. Identify at least one country-specific source for demographic data and use this source in your projection.

