Using Impact 2 to estimate your contribution to increasing national CPR

You can look at a *past* contribution based on historic service provision or estimate your *future* contribution based on planned service provision.

What this result means:

Impact 2 estimates your programme's contribution to increasing the national CPR. This is different from just looking at how your programmes user numbers have increased. An increase in user numbers does not directly translate into an increase in CPR because several important issues are at play:

- **Substitution**—some women may be new to your programme, but, not new to family planning. If clients were already using a contraceptive method from another provider, they were already 'in the CPR' before coming to your programme, so by reaching them, you will not increase CPR
- **Population growth**—as CPR is a proportional measure of contraceptive use among women of reproductive age, in countries where the population is growing, more and more women need to be reached each year just to keep CPR constant
- **Reaching adopters**— the CPR can only be increased by reaching women who are not already 'in the CPR'—we call these adopters, e.g. women not currently using FP before coming to your programme.

Impact 2 accounts for all of these factors, isolating of all the women that your programme reaches, how many can be allocated towards increasing the national CPR. Impact 2 only accounts for the services provided by your programme; this means that there is an assumption that all other providers at least maintain their baseline CPR contributions. If not, an organisation's estimated contribution to increasing CPR will instead help offset a decrease by another provider (see technical note below for more details).

What you need:

- Service provision data by method and year
- Client profile data (% adopters, % continuers, % changing providers) – this comes from exit interviews or programme plans

Step by step instructions:

1. **Open Impact 2—make sure you have enabled macros or else the model will not work**

2. **Click next, and say "yes" to the terms and conditions**
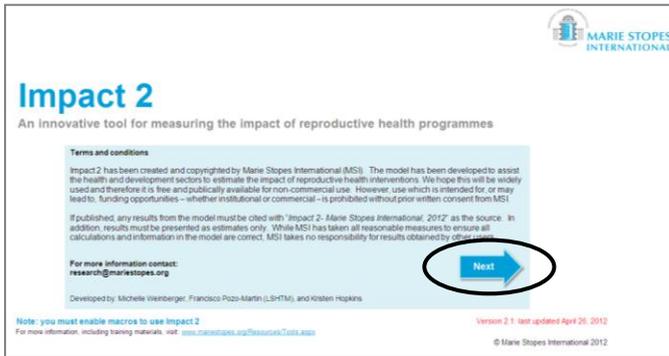
3. **Pick 'Organisation(s)' mode**

4. **Select your country from the drop down list**

    Hint: use the list on the left to filter to the list of countries you are looking for. You can also run Impact 2 on an entire region by selecting "Regions/sub-regions" from the filter list on the left.
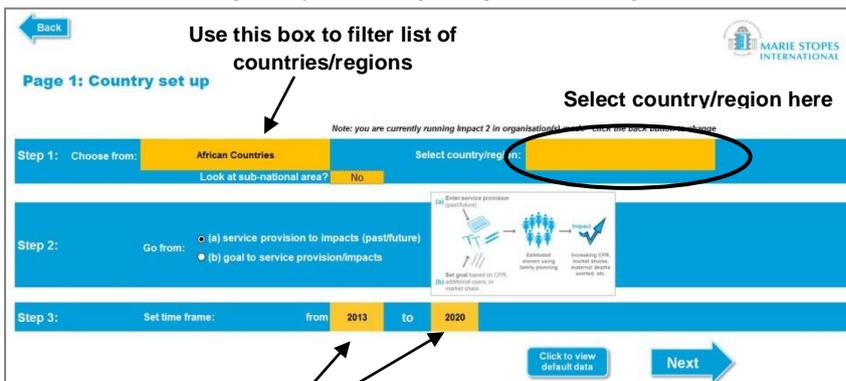
5. **Set your timeframe**
    The year *before* the start year you chose will be used as a baseline, meaning that (if you chose to include historic services—see step 9), you will only be able to increase CPR after maintaining this baseline contribution. This means, depending which start year you chose, you will get different results (i.e. your estimated contribution to increasing CPR will be different from 2001 to 2010, as from 2002 to 2010).

    *Hint: When looking into the past, you can benchmark your own contribution against 2 CPR estimates from DHS or other surveys. For example, a DHS survey was done in your country in 2005 and 2010; in this case you would want to look at your CPR contribution from **2006** to 2010 (this way, the 2005 CPR will be used as a baseline).*

6. **Click the 'click to view default data" button to check if CPR data is for all women or married/in-union women, then click next**

When available, Impact 2 has been pre-loaded with CPR data for all women. However, in some cases, CPR data is only available for married/in-union women. This is important because it determines if your contribution is measured against all women of reproductive age, or, only in-union women.
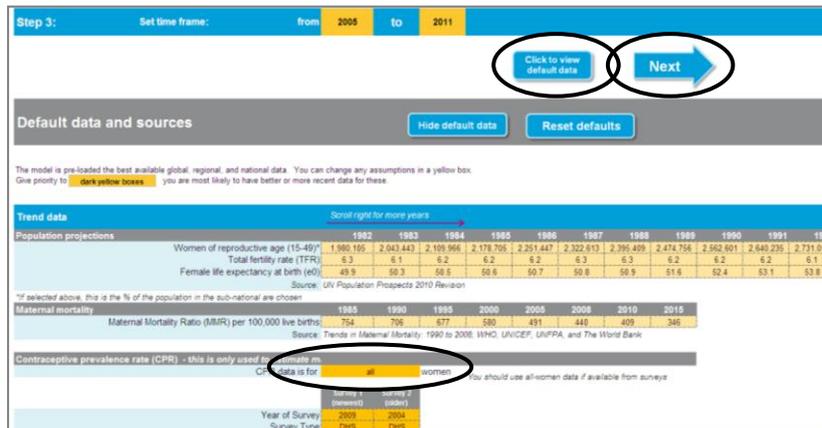
Since most programmes provide FP services to both married and unmarried women, it is preferable to measure your programmes contribution to all women using contraception. Be sure to note what is in this yellow box ("all" or "married/in-union"), because it will affect how your CPR contribution is calculated, and reported. You can choose to change this from the default selection if you want to look at your contribution to a different group.

7. **Enter your programme's service provision data for the selected period, then click next.**

For MSI country programmes, your service data up to 2013 is already preloaded. If you are projecting contribution to CPR in the future, you must enter data method for all years included in your selected timeframe. You can also add/edit service data years before the selected timeframe starts if you want to account for your historic contribution to CPR.

> *Hint: Entering historic service provision data allows Impact 2 to account for women who received LAPMs before the timeframe you have selected, who may still be protected by these methods during the years included in the timeframe. This is important to understand the full contribution your programme is making in a country.*
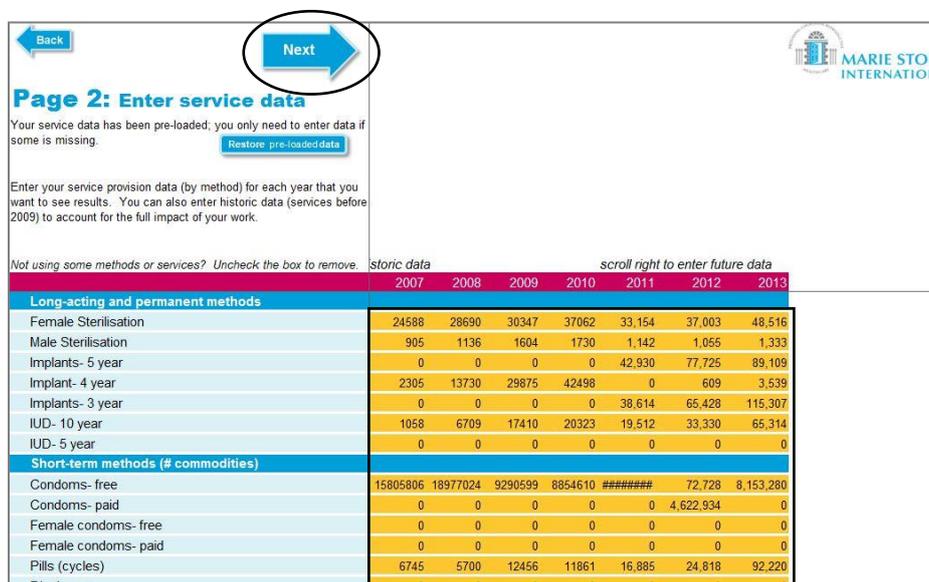
8. **Enter a client profile for each year included in your trend, then click next**

   Client profile data can be taken from Exit Interviews, or, client-based information systems. If you country does not have this data, you will need to estimate what your client profile may be. A few important things to consider:

   - You may wish to vary the client profile over time; for example, if your are expanding to a new area with low CPR you may reach a higher proportion of adopters in the first few years of your programme, but it will likely decline overtime as your begin to saturate the area.
   - Think about the design of your programme- outreach to rural areas with low CPR will likely reach a higher % adopters than providing clinic-based services in urban areas.
   - Make sure you document what client profile data you have used, so you can refer back to this later (copy and paste into a new Excel worksheet).

9. **Select "Increasing CPR" from the Impact 2 menu**
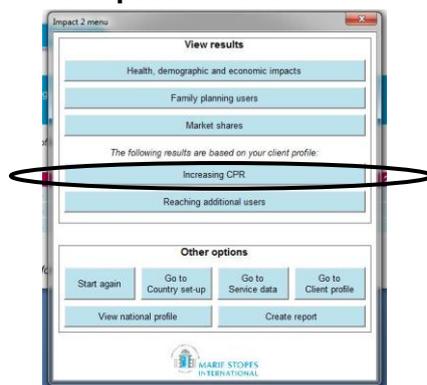
10. **Decide if you want view results 'including" or "excluding" condoms.**

   - We recommend excluding condoms so that condom use is not counted in your CPR contribution. We don't know much about how many condoms that are sold/distributed are actually used, and, in some cases, condoms are being used for dual protection (i.e. at the same time as another FP method). For these reasons, the estimated of the number of 'condom users' is not very strong.
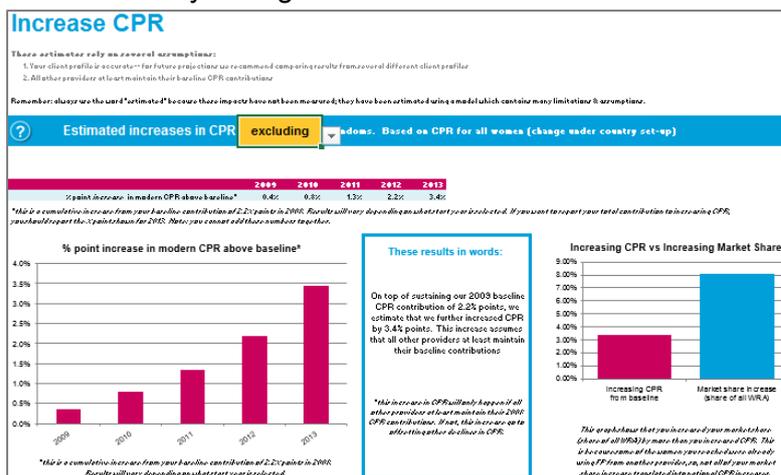
11. **Copy and paste the results-- be sure to include the correct language**

   Results are displayed in a table, a graph, and written out in sentence form in the box on the right. Each of these can be copied and pasted into another Excel file, a Word document, or a PowerPoint presentation.   Remember to note if this contribution is towards the CPR for all women, or married/in-union women (see step 6).

12. **Repeat with a client profile with a higher and lower % adopters**

   Your contribution to increasing CPR is highly dependent on your client profile. Since it is unlikely that you will have this data for all years in your trend, you have made a 'best guess' for what your client profile may look like. It is useful to look at a range of possible results, to give an idea of how much more or less of a contribution you might have if you reach more or fewer adopters. Therefore, we suggest that you repeat the calculations with 2 other client profiles:
   - 100% adopters—this is not realistic, but, will show you the *maximum* contribution to increasing CPR that your programme could have
   - Low % adopters (consider 20% adopters, 40% continuers, 40% provider changers)- this is also unlikely to be realistic, but, will show you the *minimum* contribution to increasing CPR that your programme could have if it fails to reach many adopters

   Copy and paste the resulting CPR increase results from each of these client profiles into your new Excel workbook. Then, you can create a line graph comparing the possible outcomes (see examples below).

13. **Document your assumptions and results**

   Be sure to keep a record of how you got to your results so that you can re-do the calculation at another time if need be. This means you should keep track of what service provision data was used, what timeframe was selected, and what values were entered for the client profile each year.

Ideas and considerations when using results:

- Consider generating your contribution to increasing CPR twice, once with your committed funds (including historic services) and once with these new funds (without historic services). You can then present these two results together, e.g. as a stacked bar chart.

  Hint: You can also estimate how many services would be needed to maintain your baseline contribution to make sure you have enough funds allocated to maintaining. See factsheet on maintaining your baseline CPR contribution.

- Consider generating your contribution to increasing CPR based on several different client profiles to show the range of CPR increases your programme could have depending on success in reaching adopters.   You can present your 'best guess' for what your programme's contribution might be, but then in a footnote say:

  "If we reach fewer adopters then planned, we estimate that our contribution to increasing CPR would only be x% points. However, if we reach more adopters than planned, our contribution could be as high as x% points.

Worked example—looking at a *past* contribution:

Here is an example from Madagascar. DHS surveys were conducted in 2004 and 2009—between these two surveys, modern CPR increased from 14% to 23%; a 9% point increase.

Key question: How much did Marie Stopes Madagascar contributed towards this 9% point increase?

Here is what we did:

- Impact 2 was run for Madagascar, from 2005 to 2009. The CPR data for Madagascar is for all women of reproductive age.
- Service provision data was entered for all years the programme has been operating (back to 1996), so that their full contribution could be accounted for.
- Exit interviews were conducted in 2011. These are the only Exit Interviews done in Madagascar, so, in absence of other data, the client profile from these exit interviews was applied to all years:

Client profile from exit interview

	2005	2006	2007	2008	2009
% adopters	22%	22%	22%	22%	22%
% continuers	49%	49%	49%	49%	49%
% changers	28%	28%	28%	28%	28%

- It was estimated that in 2004, Marie Stopes Madagascar contributed 0.4% point to CPR. Increases were therefore measured after this baseline contribution was maintained. The following graph, and corresponding sentence, were copied and pasted from Impact 2.

% point increase in modern CPR above baseline*

On top of sustaining our 2004 baseline CPR contribution of 0.4% points, we estimate that we further increased CPR by 0.5% points. This increase assumes that all other providers at least maintain their baseline contributions.

* this increase in CPR will only happen if all other providers at least maintain their 2004 CPR contributions. If not, this increase go to offsetting other declines in CPR.

* this is a cumulative increase from your baseline contribution of 0.4% points in 2004.
Results will vary depending on what start year is selected.

- The 2011 Exit Interviews are unlikely to reflect the % adopters reached each year from 2005 to 2010. However, because no other data sources exist for Madagascar, there is no way to get a good estimate of who the programme was reaching from 2005 to 2009. Therefore, to give an idea of the possible range of impact, the model was re-run with 2 other client profiles.

Client profile with lower % adopters

	2005	2006	2007	2008	2009
% adopters	10%	10%	10%	10%	10%
% continuers	45%	45%	45%	45%	45%
% changers	45%	45%	45%	45%	45%

Client profile with higher % adopters

	2005	2006	2007	2008	2009
% adopters	100%	100%	100%	100%	100%
% continuers	0%	0%	0%	0%	0%
% changers	0%	0%	0%	0%	0%

- The results from the three different profiles were then put together in one graph so show the range of potential contributions to increasing CPR. Note: this graph was made in a separate Excel document where the results from the 3 client profiles were cut and paste, it was not produced by Impact 2.

Marie Stopes Madagascar's estimated contribution to increasing CPR
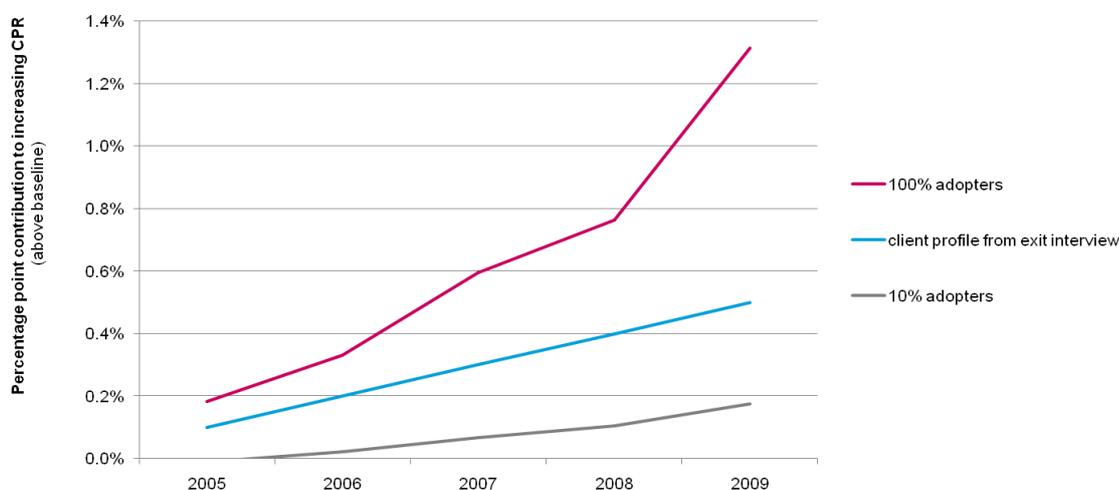
- The results were then compared to 9% point growth calculated from the DHS surveys to determine how much of the increase was contributed by Marie Stopes Madagascar (e.g. programme's x% point contribute / 9% point increase nationally) :

	Increase (2005 to 2009)	% of national increase
lower % adopters	0.2%	2.0%
client profile from exit interview	0.5%	5.6%
higher % adopters	1.3%	14.6%

- Finally, the results can then be reported as follows: "*We estimate that Marie Stopes Madagascar was responsible for around 6% of the growth in modern CPR between 2004 and 2009. This is a modelled estimate based on services provided by the programme, and client profile data from a 2011 Exit Interview. We believe that in some years, we reached more adopters than in 2011, therefore, our contribution may have actually been larger.*"

Worked example—looking at a *future* contribution:

Here is a hypothetical example from Ghana. They are developing a proposal for a programme that will run from 2015 to 2020.

Key question: How much can we contribute to increasing the national CPR over the next 5 years?

Here is what we did:

- Impact 2 was run for Ghana from 2015 to 2020. The CPR data for Ghana is for married women only. However, because the programme is designed to primarily reach married women, this option is kept, meaning results will look at the programmes contribution to increasing the CPR among married women.
- The programme's historic data up to 2014 was entered, and then from 2015 to 2020, it was assumed that services would be scaled up by 10% each year. Ideally, rather than a set % scale up, future service numbers would be estimated based on budgets and programme plans/design.
- A client profile was created that started with 60% adopters, but had this reducing to 40% by 2020 to account for the fact that as the programme expands it will be harder to reach adopters. Ideally, exit interviews will be conducted periodically during the programme so that the programme's contribution to increasing CPR can be re-estimated using actual data.

	2015	2016	2017	2018	2019	2020
% adopters	60%	56%	52%	48%	44%	40%
% continuers	20%	24%	28%	32%	36%	40%
% changers	20%	20%	20%	20%	20%	20%

- The programme's contribution to increasing CPR was estimated including historic services to account for the fact that the baseline contribution in Nepal must be maintained before CPR increases can be realised. This is especially important because the programme in Ghana has a significant baseline contribution (2% points of CPR in 2014). The following graph can then be cut and paste from Impact 2 into the proposal.

% point increase in modern CPR above baseline*
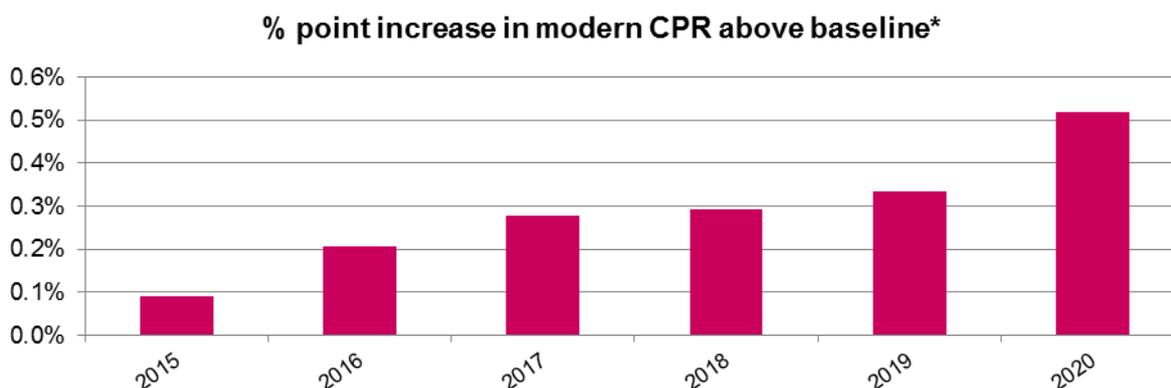
- The model was re-run 2 other client profiles, one with only 20% adopters for all years, and one with 100% adopters for all years. While reaching 100% adopters is not realistic, this gives an idea of the maximum increase the programme could achieve. Because there is no data on provider changers for Nepal, it was assumed that there was an even split between non-adopters:

Client profile with lower % adopters

	2015	2016	2017	2018	2019	2020
% adopters	20%	20%	20%	20%	20%	20%
% continuers	40%	40%	40%	40%	40%	40%
% changers	40%	40%	40%	40%	40%	40%

Client profile with higher % adopters

	2015	2016	2017	2018	2019	2020
% adopters	100%	100%	100%	100%	100%	100%
% continuers	0%	0%	0%	0%	0%	0%
% changers	0%	0%	0%	0%	0%	0%

- Results from the three client profiles were compared in a graph to give an idea of the potential range of impact, depending on how well the programme does at reaching adopters. Note: this graph was created in a separate Excel document where results from the 3 client profiles were cut and pasted, it was not produced by Impact 2.

Marie Stopes Ghana's estimated contribution to increasing CPR
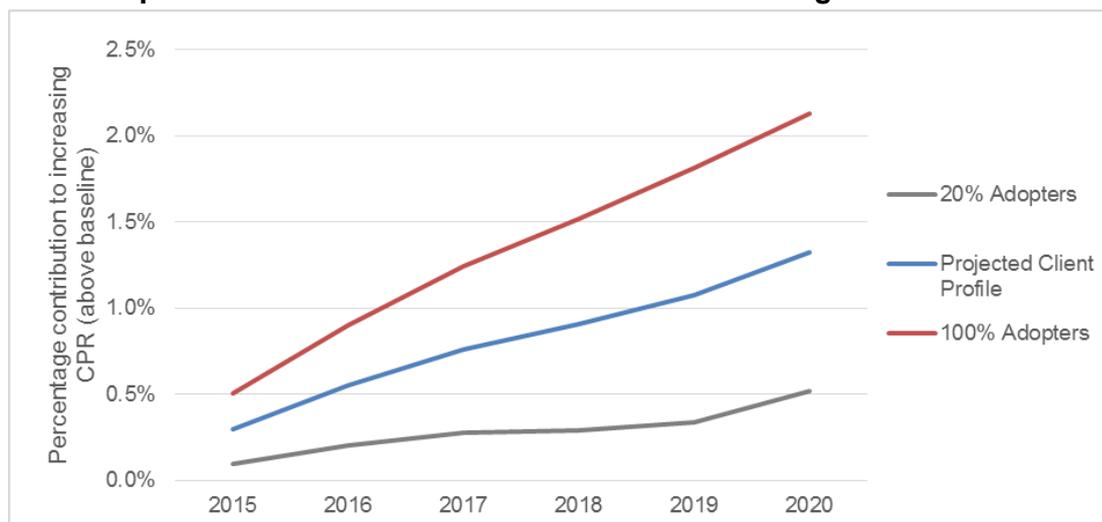
- Finally, the results can be reported as follows: *"We estimate that the services we plan to provide over the next 5 years will increase the national CPR (married women) by 1.3% points[1]; this is on top of maintaining our 2014 contribution of 2% points. Note: in order for CPR to increase, all other providers must at least maintain their 2013 contributions."* And the following footnote: "[1]*This increase is depending on how many adopters are reached; we estimated that if we reach fewer adopters than planned, our contribution to increasing CPR could be as low as .5% point, however, if we reach more adopters than planned, it could be as high as 2.1% points."*

Interpreting results

It is important to correctly interpret and write about results generated using Impact 2:

- **% point contribution to increasing CPR:** The results calculated by Impact 2 are a programme's estimated percentage point contribution to *increasing* CPR above their baseline contribution. This result is *cumulative*, meaning that the CPR increase show in the final year of the trend represents the full increase from the baseline. In addition, this means that a programme's *total contribution* to CPR will be the increase + the baseline contribution.
  - ➔ *"on top on maintaining a baseline contribution of 3% points, our programme will further increase the national CPR by 2% points"*

- **Other providers at least maintain their baseline contributions**: The model isolates the contribution on an individual service provider. In doing some, there is an underlying assumption that all other providers *at least* maintain their baseline contributions. If not, the increase contributed by the programme will offset these other declines, meaning, a national-level increase may not be realised.

➔ *"Note: in order for CPR to increase, all other providers must at least maintain their 2010 contributions."*

- **Retrospective analysis:** A programmes estimated contribution to increasing the national CPR can be compared to a measured change in CPR (based on DHS or other surveys). For example, a programmes contribution to increasing CPR from 2005 to 2010 was estimated to be 2% points. And, based on DHS survey done in 2004 and 2010; the national CPR increased by 10% points (from 20% to 30%) between these two surveys.
  ➔ *"our programme contributed 2 of the 10% points increase in national CPR from 2004 to 2010, or in other words, our programme was responsible for 1/5th of the increase in CPR."*

- **Negative results:** When including historic services, it is possible to see negative contributions to increasing CPR. This is negative because a programme did not provide enough services to maintain their baseline contribution. This means that the national CPR could decrease, unless other providers increased their service levels.
  ➔ *"Our programme did not provide enough services to maintain our 2010 CPR contribution. Therefore, unless other providers increase their contributions, national CPR may decline"*

Key assumptions and limitations
- **Results are very dependent on the client profile** (e.g. % adopters, % continuing, and % changing from another provider): It is recommended that programme's conduct regular exit interviews so that they can have an accurate picture of whom they are reaching. However, when making future projections, programmes must rely on a 'best guess' for who they are going to reach in the future. Therefore, it is recommended that CPR increases are re-run with several different client profiles to show a range of potential impact depending on how well a programme does at reaching adopters.
- **Assume all other providers at least maintain their baseline contribution:** If a provider shuts down, the assumption that other providers at least maintain their baseline contributions will not hold. In this case, an organisation may wish to count clients who change from the shut provider towards CPR contribution, rather than excluding them altogether. This is because these women might stop using contraceptives (thus drop out of the CPR) if they do not get access elsewhere. proportion of continuers.
- **Reliance on demographic projections from the United Nations:** Impact 2 uses data on fertility rates (e.g., Total Fertility Rate (TFR)) and demographics (e.g., WRA), meaning, the model is unable to account for a dynamic relationship between increased contraceptive use, fertility rates and population growth and age structure. However, because Impact 2 works on a relatively short time frame, the projected WRA population used to estimate CPR contributions will not be affected by short-term changes in the CPR and TFR, due to a lag between the emergence of smaller birth cohorts and when these cohorts reach reproductive age. Therefore the micro level results from this model are still useful and relevant.
- **Accounting for impacts beyond the CPR:** Focusing on increasing CPR does not capture many of the benefits of family planning programmes. For example, women who were already using FP from another provider do not count towards a programmes contribution to increasing CPR (because these women were already in the CPR). However, if the programme offered them greater choice of methods (and access to more effective methods), or greater quality services, an additional benefit was provided. Therefore, other metrics should also be captured to show these benefits.

For more information on how impacts are calculated, full details can be found in the methodology paper, available online here: http://www.mariestopes.org/impact-2