Goal Setting:
Past Trends, Benchmarks, Country Groupings

Introduction to FPET, FamPlan, and Reality Check

Objectives:
1. What tools can we use to create goals for future growth?
2. What outputs can these tools produce?
This presentation discusses 3 tools: Family Planning Estimation Tool (FPET), used by Track20 for FP2020 annual monitoring and the United Nations for the creation of World Contraceptive Use; FamPlan (created by Avenir health as part of the Spectrum suite of models); and Reality Check (created by Engender Health). Reality Check and FamPlan are both free software which is downloaded onto your computer. FPET is a free to use website (fpet.track20.org). All three tools come preloaded with data, but you can also add your own.

FPET is the only one of the three tools to give probabilities around its estimates. This is because it is a Bayesian Hierarchical Model. It uses information on past trends from within a country, as well as information from its geographic neighbors to produce past trends and future estimates.

FamPlan uses information from past trends to create projections, and as part of its results gives advocacy outcomes and important benchmarks.

Reality check uses past trends to produce future projections, and as part of its results produces advocacy outcomes.
Previously, most people either assumed that the level of contraceptive use was the same as it was in the most recent survey (constant 46%) or that the change was the same as the change between previous surveys. But the change over what time? In this example, if you looked at the last 2 surveys, you would expect a mCPR in 2015 of 53%. If you looked at the last 3, 49%, and if you looked at all surveys, 56%.

Now as a field, we know much more about the normal change in contraception over time. The next slide will illustrate our current beliefs on family planning growth.
Incorporating the Family Planning S-Curve

This pattern is incorporated into the model, determining the potential rate of growth in mCPR based on previous national, regional and global trends as well as the level of mCPR.

**This graph illustrates the S-Curve**

- The S-curve is based on historical trends of mCPR growth. This type of growth is known as logistics growth – meaning it is not completely linear or in a straight line.
  - As you see in stage 1, there is little or slow growth, in stage 2, there is a length if period and speed of growth and potential for rapid acceleration, and in stage 3 growth starts to slow because you’ve reached a country’s likely maximum.
- Not all countries have the same shaped S curve. Some have much slower stage 2 growth, while others rapidly transition. This is why it is important to have good data to fit to an S-Curve
- The S-Curve is the underlying assumption of FPET- in the next slide I will walk you through the benefits of the FPET model
FPET is useful when you have:

1. Conflicting survey information
2. Varying types of surveys in given years
3. Little data
4. Outdated data

Here are 4 cases that explain the value of using FPET and modeled estimates:

- Conflicting information – when the data you have does not all follow a similar trend and does not have the same level of trend
- Varying surveys in given years – when you have different types of surveys such as MICS or DHS between two years – they might have differing values but similar overall trends
- Little data – when there are not a lot of historical data points
- Outdated data – similar to little data– you don’t have recent historical trends

The next slide will walk through an example of outdated information for the Central African Republic.
Central African Republic: What to do when our data is outdated?

Last Survey: 2010 MICS
- FPET allows us to estimate progress (based on existing data as well as what we know about mCPR growth – S Curve) rather than rely on outdated survey
- Notice the uncertainty grows as more time passes from the last survey

The chart here shows FPET results for the Central African Republic from 1970 through 2030. The circles are survey datapoints - the blue dots are MICS and the red are DHS. The black bars over each dot are the survey confidence intervals. The black line is the median estimate of mCPR calculated by FPET. The dark purple is the 80% credibility interval, and the light purple is the 95% credibility interval. The median estimate is the “best guess” for what mCPR was and will be, but it would not be unexpected for it to fall somewhere in the purple range.
One of the nice features of FPET is that you can use the FPET runs for goal setting. Goals can be for CPR, mCPR, unmet need, and demand satisfied. Goals can be set either in term of percentages of women or in numbers of women.

The screen shows an example for Afghanistan. Imagine if you wanted an ambitious, but achievable goal for mCPR for married women in 2030. We enter an attainment probability of .25- meaning based of historical data we would only expect a 25% chance of meeting the goal- the corresponding mCPR is 38%.
FamPlan

- Comes preloaded with UNPD CPR data
  - Same process as FPET 50th Percentile
  - Can change CPR and unmet need
- Many results:
  - Unmet Need, TFR, Users
  - Births with risks, unintended pregnancies/maternal deaths/unsafe abortions averted
  - Infant and Child Mortality
  - Costs

FamPlan is part of the Spectrum suite of software. It comes preloaded with the median estimate of the United Nation Population Division of CPR. The United Nation uses the same FPET model to create their estimates.

You can edit the CPR or unmet need to look at the effects of change on many outcomes of interest.
Reality Check is a software that allows you to quickly make multiple scenarios. You can use the trend from previous surveys, or you can enter your own data.

One of the nice aspects of Reality Check is the ability to look at the impact of multiple scenarios on the same graph.
How to access the tools

- FPET
  - Online
  - Register for an account
- FamPlan
  - Software
  - Download “Spectrum” from Avenir Health website
- Reality Check
  - Software
  - Download from Engender Health website

All the tools are available at no cost!

All the tools are free and available online. For FPET, you need to register for an account. For FamPlan and Reality check, you need to download and install the software on your computer.