

SS to EMU Tool: Quick Question Guide

Track20 has developed the SS to EMU tool to convert family planning service statistics into one single metric of **Estimated Modern Use (EMU)**, which can be used to estimate the total volume of family planning services in years between surveys or on a quarterly basis. The **Service Statistic to EMU (SS to EMU) Tool** assists countries in reviewing their service statistic data, an important step in itself, and then converts the data into EMU, which can be compared against mCPR from surveys or other models.

This quick guide pulls out some specific questions to consider as you input data and review outputs in the SS to EMU tool. For more in-depth guidance on data inputs for SS to EMU, please refer to the [SS to EMU Process Guide](#). This quick guide also includes considerations to help you decide whether to use the EMU as an input into FPET.

The following questions are intended to help you better understand, interpret, and contextualize service statistics data, often by asking you to compare service statistics and survey data. However, it is important to keep in mind that these two data types are different and are not expected to produce the same results. Surveys and service statistics gather their data differently: surveys are a sample of the total population of women of reproductive age in the survey area, and service statistics are essentially a full listing of women that visit health facilities and providers. There are clearly overlaps in who is recorded in the two approaches, but the groups are not the same. However, even though the values are not expected to be the same, comparing them can provide insights into the quality of service statistics. The trends from surveys and service statistics should be the same during overlapping time periods. By looking at these trends, you can gain insight into the quality of your service statistics.

What do I look for when reviewing Service Statistic Input graphs?

At the bottom of the service statistic data input tabs, graphs will visually represent the data you entered. If outliers are detected, do they signify an error in data entry or in understanding and reporting of the indicator? Or does the anomaly reflect real short-term changes?

Some questions to consider as you review:

- 1) How are these trends being influenced by reporting rates? Should some years be excluded for low or inconsistent reporting rates?
- 2) Do trends look consistent with your understanding of current programs in FP?
- 3) If declines in a given method are seen, are these consistent with changes in method availability, distribution, and your understanding of trends in method choice?
- 4) If dramatic growth in a given method is seen, is this attributable to the introduction of a new method? New or expanded efforts to socialize that method? Or might it be attributable to changes in the reporting system/incentives?
- 5) Are declines in one method accompanied by growth in another method, indicating women switching between methods?
- 6) Are there any outlying values (very high or very low compared to the overall trend for the method)? If so, could this be a data quality issue?

What do I look for when I review the Service Statistic Output graphs?

At the bottom of the service statistic output tabs, review the graphs for unexpected data points and compare service statistics and survey data.

- 1) How do the trends in use by method look? Are particular methods growing/declining? If so, is this consistent with your understanding of what is actually happening?
- 2) How does the method mix look? Is the most common method based on service statistics consistent with the most common method captured in surveys? Is it consistent with what is understood about contraceptive use in the country/region?
- 3) How do the service statistics and survey data differ?
- 4) Why do you think they differ? If so, can you explain the difference?
- 5) In cases where the actual data points are different, are the trends similar?
- 6) How does the overall trend from the EMU compare to the trends from Surveys (if available) or from FPET/UNPD?
- 7) Consider the growth rates – is the growth rate from your EMU higher or lower than that of surveys or modeled estimates? Does the growth rate seem feasible? How does it compare with and without condoms?

What should I be looking for as I review the final EMU Output results?

Comparing EMUs and mCPR:

- 1) Which data trend is most consistent with your survey and FPET trends?
- 2) Which data type produced the cleanest trend (least "noise")?
- 3) Is one data type typically viewed as more reliable by the government? How does this compare to the other types of data?

Comparing annual average percentage point growth between EMU and mCPR

- 1) Which data type's average annual growth is most consistent with FPET & Survey results?
- 2) Do any data types have excessively high growth rates?

Comparing Reporting Rates

- 1) Which data type's average annual growth is most consistent with FPET & Survey results?
- 2) Do any data types have excessively high growth rates?

Which service statistic EMU should I use for program monitoring and as my FPET input?

While you should have input all available service statistic types, you will have to select one for use as a monitoring metric or FPET input. Consider the following:

- 1) Which data type had a trend most consistent with FPET & surveys?
- 2) Which data type has an annual growth rate most consistent with FPET & surveys?
- 3) Which data type has the highest and most consistent reporting rates?

Do your data meet the criteria for inclusion in FPET?

The EMU can be an important input for the Family Planning Estimation Tool (FPET), allowing FPET to consider service statistics as an input to calculate estimates of mCPR, unmet need, and demand for family planning satisfied by modern methods beyond the date of the last survey and into the future. If your data meet the criteria recommended for EMU inclusion in FPET, you can confidently include your EMU in FPET. If your data do not meet all criteria, further review of EMU results is advised before proceeding with inclusion of EMU in FPET. *Keep in mind that FPET can still produce estimates of mCPR, unmet need, and demand for family planning satisfied by modern methods without an EMU input and that data do not need to meet all the following criteria to use SS to EMU for data review and program monitoring.*

1) Data Availability

- a) Do you have data that capture national family planning service statistics in your country, such as commodities distribution data (either to clients by providers OR to facilities), family planning visits data, or family planning users data? The source for these data would be your country's health management information systems (HMIS), or in some cases, the logistics management information system (LMIS).

2) Data Frequency/Recency

- a) Do you have national annual estimates of these data for a minimum of three years?
- b) Do you have service statistics that overlap with a national survey (DHS, MICS, PMA2020, or other national survey)? We strongly recommend that this be the case, so that you can 'calibrate' the relationship between service statistics and mCPR.
- c) Do you have service statistics that are more recent than your last survey? For example, if you had a 2017 survey, and your service statistics only go to 2017, then you do not need to use them in FPET, since it will favor the survey.

3) Data Consistency

- a) Are your service statistics figures consistent from year to year, so that one can compare them to each other and 'believe' the trend they represent? For example, are reporting rates for these figures consistent from year to year? Are the estimates for each year representing the same methods/facilities?
- b) If your answer to 3a is 'no', do you know why the data is not consistent? For example, did you change HMIS systems (introduce DHIS2)? Was there a reason that service statistics were not reported for a specific year? Do you have a way of adjusting the data to make it comparable between years?

4) Data Quality

- a) Is the quality of your data similar from year to year (i.e. none of the years are missing specific data, or all years are missing the same data)? If, for example, there was a problem with availability of registers one year, then that year should be excluded. But if the same problem occurred in all years, it is fine to use these data, as the effect on the data quality would be the same in each of the years.
- b) Are reporting rates high and consistent over time?

- 5) If reporting rates are over 80% then the data can be used, however, if reporting rates are below 60%, these years should be excluded. Data with reporting rates between 60-80% may be usable but require further review. See below for further guidance on making this decision.
- 6) **Data Accuracy**
 - a) Do the service statistics figures seem to be in line with your country's family planning program and how it's changed over the years? Are you seeing changes in the methods that reflect the countries efforts? For example, if a new method has been introduced, are you seeing that reflected in your service statistics?

If my reporting rates fall between 60%-80%, should I use my EMU result as a FPET input?

- 1) Are the same regions consistently reporting or not reporting?
 - a) If there are certain regions that consistently do not report, thus causing a reporting rate <80%, the data may be usable as the bias in the service statistics should be consistent across years. While the level of the EMU may not match the national prevalence as certain regions are missing, the trends should generally represent what is happening at the national level.
 - b) If there is inconsistency in which regions are reporting, with different regions failing to report in different years, the data may not be useable in FPET as the bias is inconsistent across years. Changes in which regions are included or excluded may create artificial trends in the EMU, implying growth or decline based on which regions are included if there are differential levels of use or effort in those regions.
- 2) Is there consistency in the reporting rate? Or does it vary year to year?
 - a) If the reporting rates are below 80% but generally consistent between years, the data may be usable in FPET.
 - b) If the reporting rates are inconsistent between years, the data may not be useable in FPET. Large changes in reporting rates between years may imply growth or decline that is not actually occurring but is an artifact of more or fewer facilities being represented in the data.
 - c) Inconsistency may not require the exclusion of all years of data – if reporting rates level out, the user may be able to use just those years of data for which there were consistent reporting rates.
- 3) How would reporting issues impact estimates?
 - a) Consider how your data compares to survey and modeled estimates and whether reporting issues may be causing inconsistencies or irregular trends or patterns.