For most countries, 2021 is the first year since the COVID-19 pandemic began in which a more comprehensive study of the impacts of COVID on family planning (FP) service uptake and use has been possible. Complete 12-month data sets from HMIS or routine data were finally available, and Monitoring and Evaluation (M&E) officers working within Ministries of Health in multiple countries had access to new tools from Track20 to analyze changes in trends and levels to better understand impacts from COVID on their programming.

Real-time data inputs from service statistics have proved essential during the COVID-19 pandemic, and governments used these data to track impacts on service delivery and uptake and to identify areas requiring additional support. While routine data can tell us a lot about impacts from shocks, data quality can be an issue. Track20's work with countries has improved FP data quality over time, and the number of countries now able to use routine data in modelled estimations of mCPR has been steadily rising. The number of FP2020 countries able to use service statistics to monitor FP after surveys has grown from 5 in 2014 to 21 in 2020. Among countries that have had their FP2020 estimates validated in consensus meetings, the proportion using HMIS in modelled estimates grew from 38% in 2016 to 75% in 2020. In 2021, 78% of reporting countries used service statistics. While the 2021 number is not directly comparable because it is based on a smaller number of countries (at the time of the analysis not all countries had reported), the high proportion still signals of the stability in HMIS data quality despite the pandemic.

Routine HMIS data are well-positioned to examine impacts of COVID due to their ability to examine:

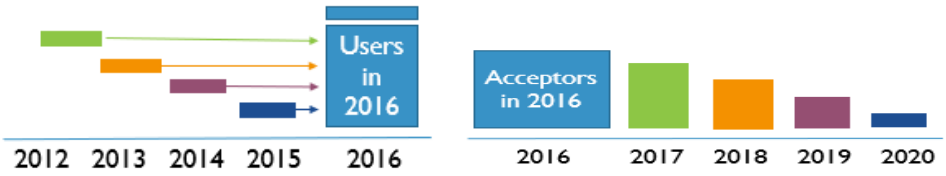
- inter-survey periods
- short time periods of disruption of services
- current status
- lower geographic levels than surveys.

In the FP2020 Annual Progress Report published in 2020, we reviewed the use of routine data to understand impacts of COVID in terms of Couple Years of Protection (CYPs) distributed. This year we expand our analysis to present analysis on coverage, volume, changes in the share of women using certain methods, and geographic differences. This year's analysis is based on select countries, and because HMIS data is not publicly available in most countries, we have anonymized the data.

Analysis Approach: transforming service statistics to Estimated Modern Use

To understand changes in coverage we use the Estimated Modern Use (EMU) calculation. Track20's EMU calculation uses adjusted service statistic data as a basis for estimating a population-based proportional indicator (a percentage versus a whole number), designed to represent contraceptive use. For short term methods (STMs) the adjustments are made for the private sector not reporting into HMIS. For long acting and permanent methods (LAPMs) we take a few additional steps illustrated in Figure 1 below.

Figure 1. How LAPM are handled in the EMU conversion



The two images in Figure 1 illustrate how data from HMIS on volumes can be translated into estimates of LAPM users. In this example we consider the period from 2012 through 2020. First, women using LAPMs in 2016 could have obtained their method in different previous years. Second, women obtaining a LAPM method in 2016 will use into the future. CYPs apply the full impact of LAPMs in the year the method was distributed. When counted in this way, an implant, for example, would show benefit in the year it was inserted, but no impact in future years, even though it continues to provide contraceptive protection several years into the future. In the EMU calculation, that impact is distributed across the years a method would be in use, based on the standard continuation rates used to develop the CYP factors. This serves to smooth out trends in long-acting contraceptive use, as there may be fluctuations in the acceptance of LAPMs by clients which are *unlikely to result in immediate fluctuations in use* as women continue to use these methods over several years. These adjustments make the EMU an easy way to utilize service statistics for analysis.

The aim of our analysis was to use service statistics to the fullest extent possible to answer important questions about COVID-19 impact.

Can service statistics still be relied on during a system shock like COVID-19?

Our analysis found that for most of the 30+ FP2030 countries that work with Track20, data completeness was not affected by COVID disruptions and family planning reporting rates remained resilient. Fig 2a compares reporting rates in 2019 to those in 2020, showing monthly fluctuations in reporting rates for a select group of Anglophone countries. One country fell below the WHO benchmark of 80%, but this represented its pre-COVID status. Figure 2B, shows a similar story for Francophone countries that retained or improved upon reporting rates, with one exception in 2020.

Figure 2A. Reporting Rates for Family Planning in routine HMIS, 11 Anglophone Countries

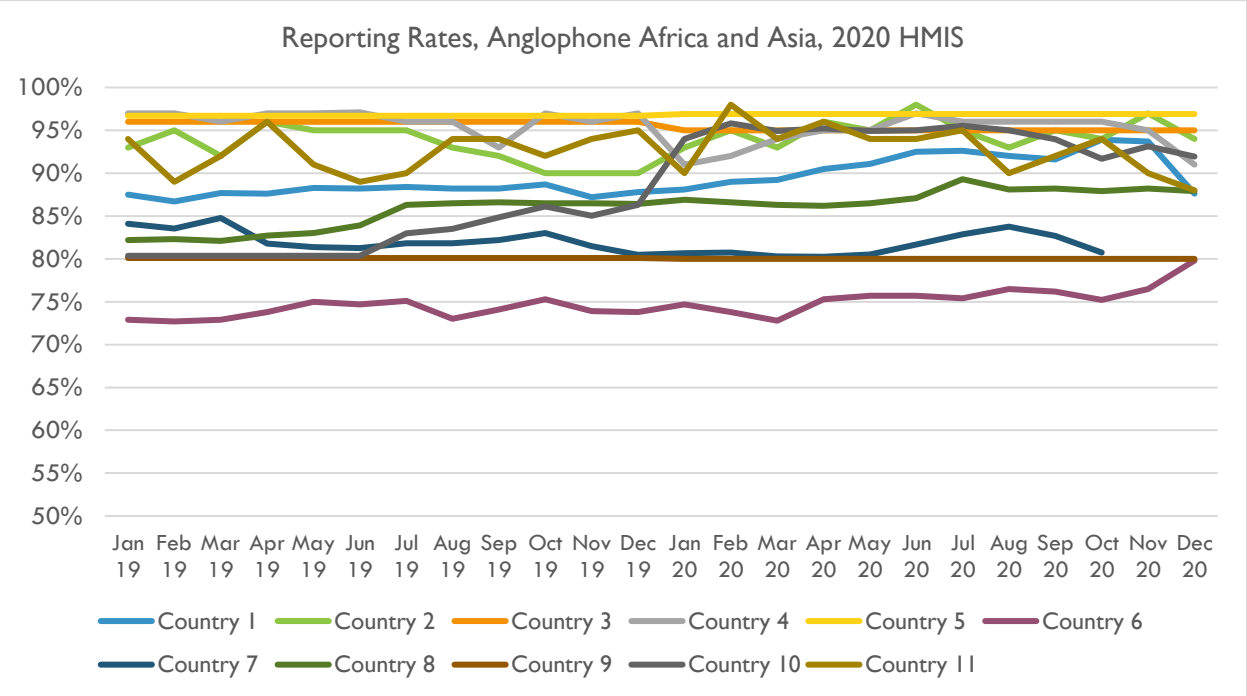
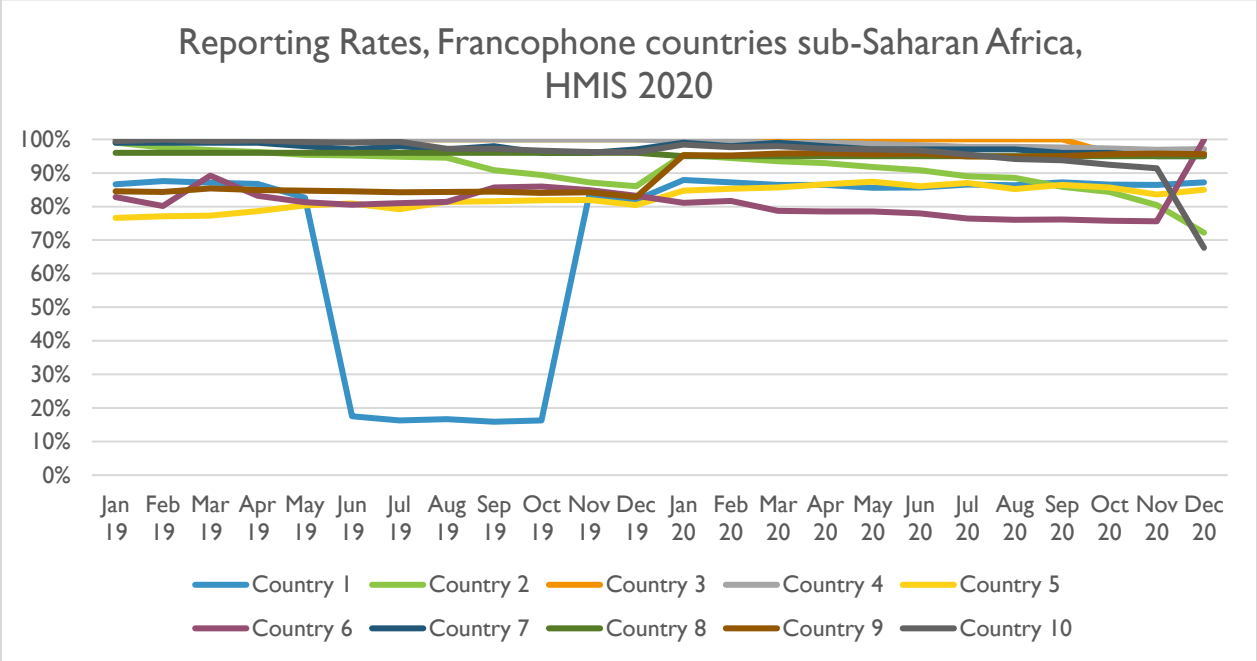


Figure 2B. Reporting Rates for Family Planning in routine HMIS, 10 Francophone African Countries



In many countries, though reporting continued, COVID created data timeliness issues. There were delays in entering the data into the system and in many countries data entry deadlines were missed. An important caveat is that most countries do not have FP specific reporting rates and instead rely on reporting rates for the overall HMIS/DHIS2. For these countries FP reporting may well be below overall reporting, and this pandemic showcases the value of having program specific rates.

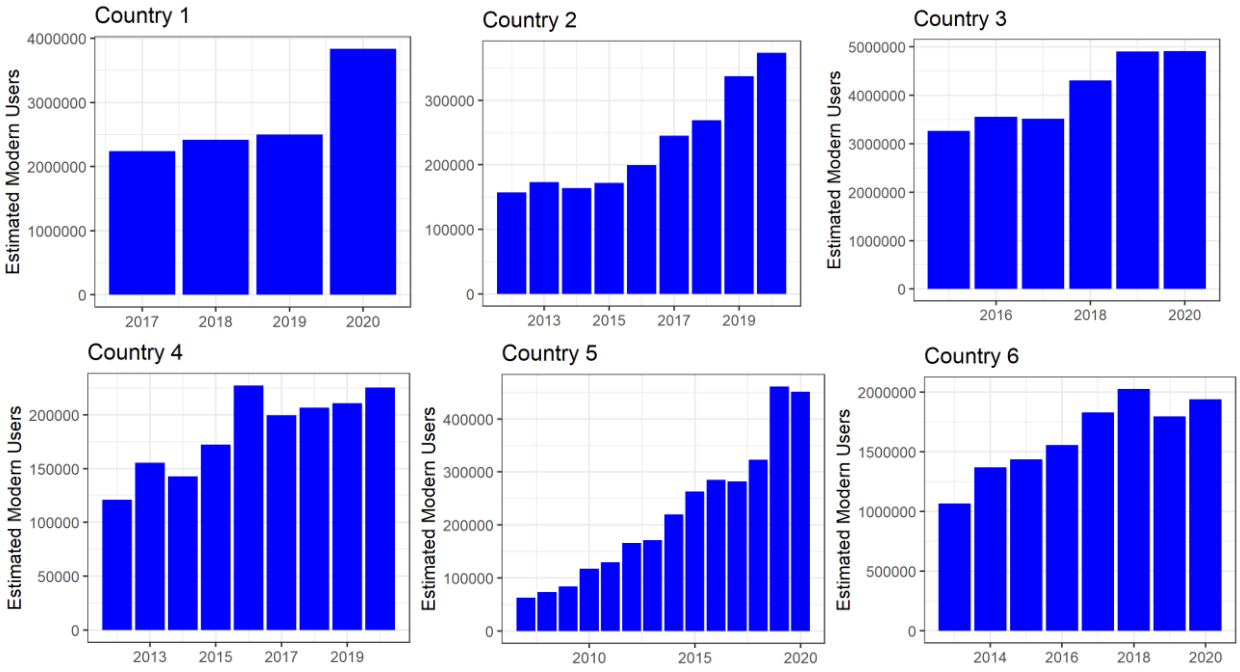
Most countries opted to be transparent about reported volumes, so that data on drops in service uptake and coverage could be identified and flagged for action. This was done not just for FP, but all RMNCH indicators. To enhance analysis during COVID, many countries sought more granular data in terms of both frequency and geography starting in March 2020. Zimbabwe is an example of a country that switched to weekly surveillance of health with FP visits included as a key indicator. A few pivoted to finding new ways to deliver services and monitor data. Philippines provides an example of a country that used door-to-door delivery of contraceptives to mitigate against client fears and facility closures during the early pandemic in 2020. Nepal used support from Track20 to develop an application for DHIS2 to allow the program to monitor fluctuations in *private sector* service provision.

How do modeled estimates of users compare to actual users? Did COVID impact the expected trend?

Long term trends available from HMIS provide an opportunity to model expectations of annual changes in the number of users. We used this approach to estimate the number of users expected in 2020 (based on pre 2020 data) and then compared those estimates to the actual number of users seen in 2020 data. The projections assume no change in method mix or source of method. We compared the expected EMUs with actual EMUs calculated from reported data to assess whether there were fewer users, and fewer long-term users than we expected to have in 2021. We will walk through each step of the analysis process below.

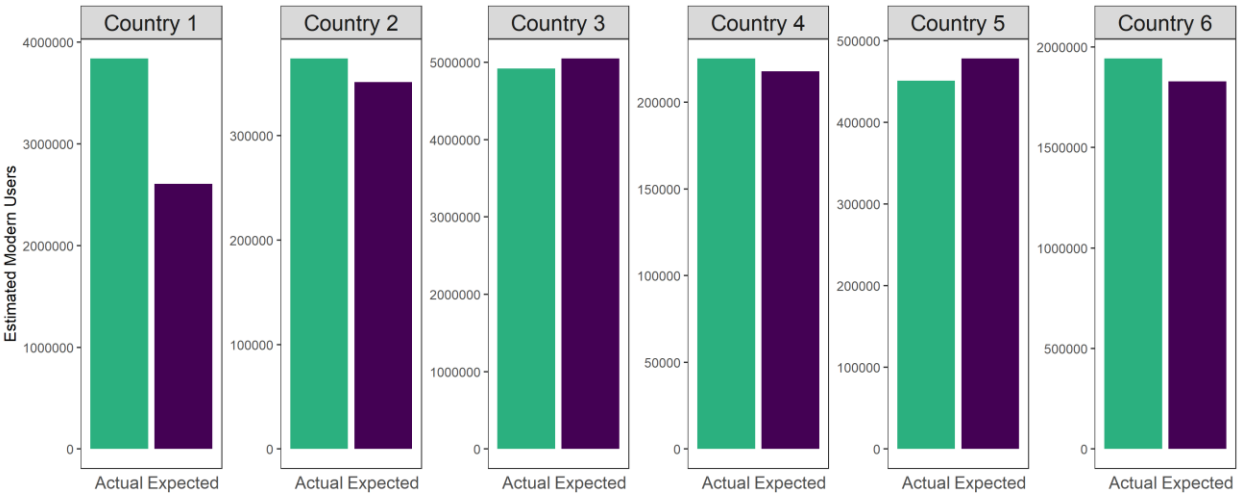
First, we look at trends in EMU over time for six countries. Figure 3 below shows results for a subset of countries in sub-Saharan Africa. These graphs show the trend in total users over a period of 4-14 years, depending on data availability, ending with the actual EMU calculated for 2020.

Figure 3: Trends in EMU across 6 African countries



Next, we compare the 2020 actual EMU to the expected EMU (estimates based on previous trends) to see if COVID altered the expected trend. The green bars in Figure 4 match the 2020 value shown for each country in Figure 3. The purple bars show the estimated EMU value for the same year.

Figure 4. Actual versus Expected EMUs in 2020, six countries

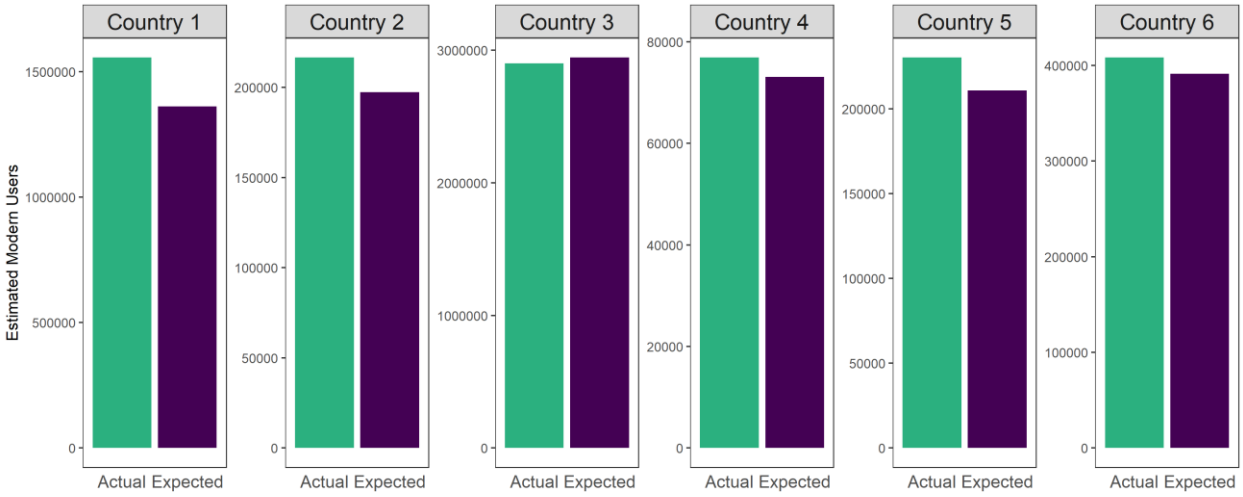


EMUs are higher than expected in four of the six countries. For two (countries 3 and 5), the actual EMUs were lower than what was expected. Relative to what we would expect from predicted growth, in most countries, the actual EMU was higher than the predicted EMU, despite COVID-19.

Do we see different impact on long acting and permanent methods?

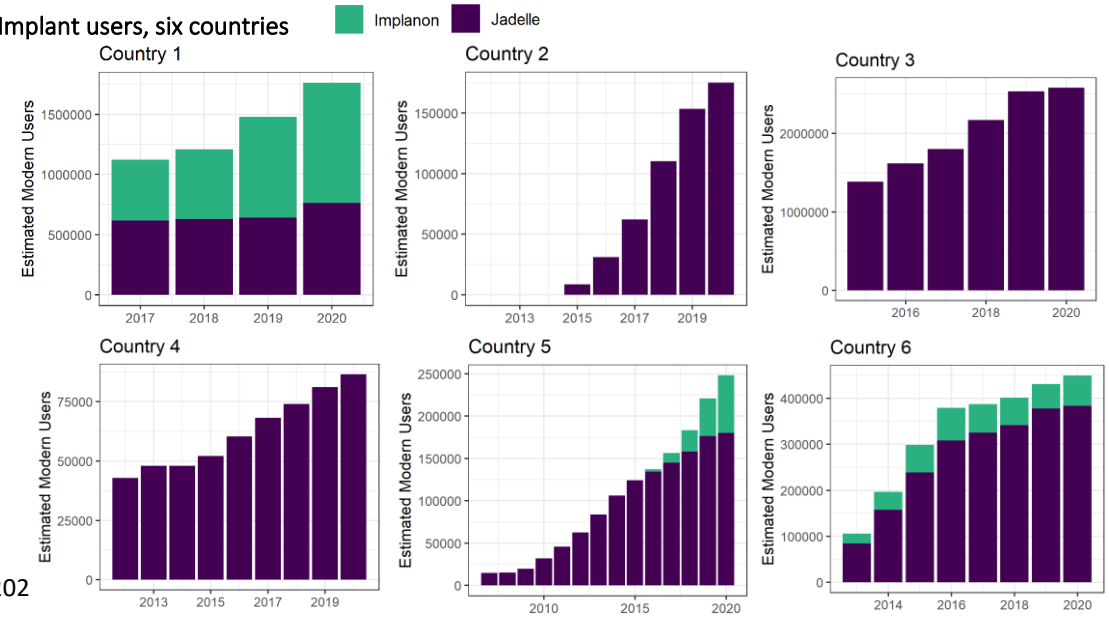
We wanted to further explore if LAPMs, which are most likely provided in facilities, were impacted differently. The analysis showed that in 2020 LAPMs continued to grow in five out of the six countries. Only country 3 had fewer implant users than expected. Figure 5 below compares expected EMUs for LAPMs compared with actual EMUs calculated from reported volumes.

Figure 5, 2021 Expected versus Actual LAPM users in 2020, six countries



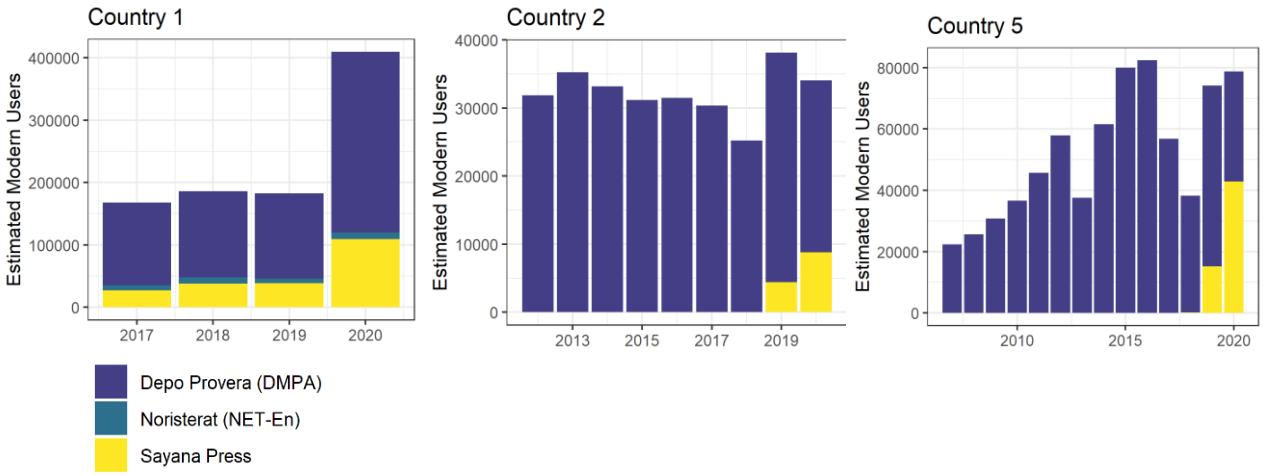
Prior to the COVID pandemic, many countries were scaling up or rolling out implants and Sayana Press. We wanted to explore COVID's impact on these new methods and see what the data could tell us about whether these efforts were slowed or halted during the pandemic. Figure 6 looks at implant data from HMIS (three of these countries [1, 5, and 6] disaggregate Implanon (green) and Jadelle (purple). All six countries continued to see increases in implant use in 2020. However, there was some variation in the rates of increase seen in 2020. In three of the countries (1, 4, and 5) the rate of increase is similar to the year before. In the other three (2, 3, and 6) the rate of increase was smaller in 2020 compared to 2019.

Figure 6. Implant users, six countries



For a further subset of countries where Sayana Press had been introduced prior to 2020, and where it is captured independently within HMIS, it was possible to examine if there was a change in trends of users of injectables in 2020. Figure 8 shows results from three countries. Method-specific scale up in this very small sample suggests that efforts to roll out and scale up Sayana Press were not largely impacted by COVID. In all three countries Sayana Press use increased in 2020 at larger rates than the increases in 2019.

Figure 7. Injectable users, 6 countries



This data, although representing a small set of countries, suggests that the impact from COVID on contraceptive use may be lower than expected. Most countries met or exceeded expected growth and efforts to scale up and roll out newer methods were able to continue.