This document is part of a series that describes how routine data were used in research and evaluations of health programs and projects. Data for Impact (D4I) has compiled these examples from its own work and the work of others found through a literature review—and consultation with the original authors—to compare ways routine data can be appropriate for evaluations and to shed light on its benefits and shortcomings for evaluation.

A companion guidance document compiling these lessons is available at the D4I website. This suite of materials may be useful for others contemplating using available and routine data in their own work.

MEASURE Evaluation was contracted by USAID/Mali to conduct an evaluation of the 2016 national campaign and, a year later, to evaluate if the 2017 campaign had applied the recommendations of the earlier study. Access the full 2017 report.

Program Description
The Republic of Mali has one of the lowest levels of modern contraceptive use in the world, estimated at 16.4 percent in 2018 (INSTAT & ICF 2019). Low contraceptive use leads to high fertility rates and population growth, and is associated with high infant and maternal mortality. The Government of Mali is committed to improving the use of modern family planning (FP) through its participation in the FP2020 initiative, the Ouagadougou Partnership, and the Sahel Women's Empowerment and Demographic Dividend.

As part of these commitments, the government organizes an annual campaign to promote the use of FP. After the 2016 FP campaign, the United States Agency for International Development (USAID) in Mali asked MEASURE Evaluation to evaluate how well the 2016 campaign had been implemented so that Mali could use those findings in planning its 2017 FP campaign. An important recommendation for improvement was that the full range of modern contraceptive methods had not been easily available for couples even as the methods were promoted as part of the 2016 campaign.

The 2017 FP campaign was delayed, in part, as the government moved to address that recommendation and to ensure sufficient FP commodities were in stock during the campaign. Although delayed, the 2017 FP campaign was implemented and USAID again asked MEASURE Evaluation to conduct a process evaluation to find out how well recommendations had been incorporated into the 2017 campaign. This brief provides the results of that evaluation of the 2017 campaign.

Justification for the Use of Routine Data
Several data sources were used for the evaluation, but the scope of this brief is to examine how routine data were used. More information on the other methods used can be found in the original report. Routine service statistics reported through the District Health Information Software, version 2 (DHIS2) were the main sources of quantitative information about the 2017 FP campaign and its outcome indicators.
Use of Routine Data in Evaluation:  
Technical Brief  
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Assessment of the 2017 National Campaign  
for the Promotion of Family Planning in Mali

DHIS2 data were the only feasible data source for these measures in the absence of a population-based survey, which would have been prohibitively expensive.

To evaluate the 2017 campaign using these data, MEASURE Evaluation developed a customized standard data collection tool (hereinafter referred to as the “standard form”). We incorporated it in the DHIS2 reporting platform to ensure that the necessary FP indicators were captured. The ability to supplement routine information from DHIS2 with campaign-specific data from the standard form greatly aided this assessment.

**Evaluation Questions**

The assessment used routine data to address the following evaluation questions:

- To what extent were the results and recommendations from the 2016 evaluation reflected in the planning and implementation of the 2017 FP campaign? To what extent did the results and recommendations from that evaluation improve the implementation of the 2017 campaign?
- What were the outcomes of the activities of the 2017 campaign?
- How well did the campaign address the target audience of youth?

**Data Description and Data Management**

**Data Collection on the Standard Form**

Using the standard form, health facility staff collected data on the number of new FP users, by method; inventory of FP methods and contraceptive stockouts, by method; and the number of people receiving FP counseling, by sex and by age (ages 10–14, 15–19, 20–24, and 25+). The form also recorded information on how participants had heard about the campaign (radio, TV, health center, friend, etc.), and data on the number of people sensitized during the campaign through various mechanisms, such as health center talks, talks in the community, films, and advocacy efforts.

**Electronic Data Capture**

The standard form was completed by health facility staff. They either entered information from the form into the DHIS2 data entry screen, modified to include the form’s data fields, or they sent the completed standard form to the district health manager who entered the data into DHIS2. After the 2017 FP campaign, the captured data were extracted—allowing several months’ time for late reporters to enter their data.

**Assessment of the Usability and Quality of the Data**

There was no formal assessment of data quality at the time it was entered into DHIS2. After data extraction, it became apparent that some of the indicator definitions on the form were unclear and so some of the data collectors’ interpretations of the questions and data field content varied from facility to facility. There were also issues with late submission of forms, incomplete forms, and sometimes forms were late and incomplete. Completeness of data varied by region.

**Data Availability**

The number of facilities reporting was lower than expected, with overall reporting less than 39 percent of sites in the campaign. Only one percent of the facilities reported data in a timely manner. This was partly due to security issues in some areas of the country. Some regions were not able to submit any data or only small amounts of data. Data on stockouts from routine sources were not complete and the information had to be collected through supplemental sources.

**Data Accuracy**

In addition to some indicators not being well defined, some data collected by the facilities may not have been appropriate to report at that level because health center staff may not have been directly involved in the efforts. Examples are indicators on the number of community-based events and non-facility-based advocacy activities.

**Missing Data**

Underreporting was a problem at both facility and regional levels. With fewer than one-half of the facilities completing the standard form and no reporting at all from facilities in some areas, bias was introduced in the results, meaning that the
evaluation findings and the exploration of the outcomes of the 2017 campaign are not generalizable.

**Data Analysis Methods Used**
The routine data was useful for generating simple statistics. For example, the number of new users, by method and age, were tabulated overall and by district. The same analysis was completed for those who received FP counseling, by age and sex. The total number of FP methods distributed during the campaign was calculated, and the number of average stockout days was determined during the campaign period, by method and by district.

**Limitations in Using Routine Data for Evaluation**
The routine data system collected limited information on FP at the time of the evaluation. Even with the addition of the standard form, there were still problems with timeliness of reporting and adherence to reporting requirements. Unclear definitions of some of the standard indicators and how to calculate certain indicators were also limiting factors. It should be noted that the DHIS2 had only recently been introduced at the time of the evaluation. Improvements in reporting and accuracy of reporting are possible with proper training and supervision and will allow the data to be more useful in the future.

**What Worked Well**
The addition of the standard form to the DHIS2 was helpful in being able to capture all FP indicators, despite some of the limitations already discussed. The use of the routine data for this evaluation and the subsequent identification of the data quality issues have helped those responsible for data collection see the importance and value of routine data. Recommendations were made by the evaluators to continue use of the standard forms and to strengthen the information system so that validated data on FP service delivery is available.

**Conclusion**
Although there were some major limitations in the use of routine data in this evaluation, the DHIS2 and the standard form were the only cost-effective sources of data for the outcomes being assessed. The benefit of using routine data was that the problems drew attention to the importance of collecting high-quality FP data and the potential usefulness of routine data systems for guiding strategies and programs. The DHIS2 was just being rolled out in Mali at the time of the evaluation and is now being strengthened—which may provide more opportunities for using DHIS2 routine data in evaluations going forward.

To learn more, visit [www.data4impactproject.org](http://www.data4impactproject.org)