

WORKING PAPER

# Integrating Family Planning Data from Public and Private Health Facilities in Malawi

How Current Approaches Align with  
Global FP2020 Goals

April 2018



# Integrating Family Planning Data from Public and Private Health Facilities in Malawi

## How Current Approaches Align with FP2020 Goals

**Evelyn Evah Mwaungulu**, MPH

**Zione Dembo**, MSc

**Peter Mtema**, MScs

April 2018

### **MEASURE** Evaluation

Carolina Population Center

University of North Carolina at Chapel Hill

123 West Franklin Street, Suite 330

Chapel Hill, North Carolina, USA 27516

Phone: +1 919-445-9350

[measure@unc.edu](mailto:measure@unc.edu)

[www.measureevaluation.org](http://www.measureevaluation.org)

This publication was produced with the support of the United States Agency for International Development (USAID) under the terms of MEASURE Evaluation cooperative agreement AID-OAA-L-14-00004. MEASURE Evaluation is implemented by the Carolina Population Center, University of North Carolina at Chapel Hill in partnership with ICF International; John Snow, Inc.; Management Sciences for Health; Palladium; and Tulane University. Views expressed are not necessarily those of USAID or the United States government. WP-18-209



## ACKNOWLEDGMENTS

Integrated Health Initiative (IHI), a Malawian nongovernmental organization, assembled a team of three consultants to implement this study. IHI is grateful for the consultants' efforts and contribution.

The team is grateful to the United States Agency for International Development (USAID), through the USAID-funded MEASURE Evaluation, for offering IHI an opportunity and financial support to undertake the study. We are grateful especially to Bridgit Adamou, of MEASURE Evaluation at the University of North Carolina at Chapel Hill, for her tireless technical and administrative support throughout the study.

We are also indebted to the Central Monitoring and Evaluation Division (CMED), of the Ministry of Health, for embracing this project from the start to the end. Within CMED, special recognition goes to Deputy Director Isaac Dambula and Golden Chanansi for their resourcefulness, which enabled this study, and the Reproductive Health Department (RHD) for taking a big part in the study.

We thank all the stakeholders involved for opening their doors during data collection: the Family Planning Association of Malawi (FPAM), Banja La Mtsogolo (BLM), Christian Health Association of Malawi (CHAM), Population Services International (PSI), and pharmacies too numerous to mention in Blantyre, Zomba, Lilongwe, Nkhatabay, Dowa, and Mzimba North. We further extend our gratitude to IHI's management team and the entire board for their relentless work on the study, particularly their technical support, professional guidance, review of the report, and general ethical guidance. To our data collectors and all the respondents, we say thank you for the marvellous work you did. The study team consisted of Evelyn Mwaungulu (lead researcher), Zione Dembo (coresearcher) and Peter Mtema (data analyst).

We thank the knowledge management team of MEASURE Evaluation, based at the University of North Carolina at Chapel Hill, for editorial and production services.

# CONTENTS

Executive Summary .....	6
Introduction .....	8
Research Objectives.....	8
Methods .....	10
Study Design.....	10
Study Population and Sampling Strategy.....	10
Data Collection.....	10
Data Analysis .....	11
Ethical Considerations .....	11
Results .....	12
Family Planning Services Offered .....	12
Data Sources, Entry, and Management .....	12
Data Transfer Procedures and Protocols.....	12
Challenges with Current Data Integration Approaches.....	13
Discussion .....	15
Family Planning Dataflow from the Private Sector.....	15
Data Integration Approaches .....	15
Family Planning Dataflow: From Service Provider to Policymakers.....	16
Challenges with the Prevailing Data Integration Approaches .....	16
Recommendations.....	18
Potential Approaches to Improve Data Integration.....	18
Policy Implications of the Proposed Data Integration Approaches.....	18
Conclusion.....	20
References .....	21
Appendix B. Question Guide.....	22

## Abbreviations

BLM	Banja La Mtsogolo
CBDA	community-based distribution agent
CHAM	Christian Health Association of Malawi
CMED	Central Monitoring and Evaluation Division
CIP	costed implementation plan
DHO	district health office
FP	family planning
FPAM	Family Planning Association of Malawi
HIS	health information system
HMIS	health management information system
KII	key informant interview
mCPR	modern methods contraceptive prevalence rate
MOH	Ministry of Health
MSI	Marie Stopes International
PSI	Population Services International
RHD	Reproductive Health Department
SHOPS	Sustaining Health Outcomes through the Private Sector
UNICEF	United Nations Children's Fund

## EXECUTIVE SUMMARY

**Introduction:** Family planning (FP) data from public and private health providers in Malawi is not integrated, which makes drawing a national FP picture challenging. The country's 2016 costed implementation plan (CIP) review of progress indicated a modern methods contraceptive prevalence rate (mCPR) of 45 percent, which is far below the set goal of 60 percent mCPR (Malawi FP2020 Progress Report, 2016). However, this progress report was incomplete because it excluded data from private facilities, which provide up to 40 percent of the health care in Malawi (Sustaining Health Outcomes through the Private Sector [SHOPS] Project, 2012).

**Objectives:** The objective of this study was to find approaches to improve the national health information system (HIS) by integrating FP data from private-sector service delivery points and government facilities. This research aligns with MEASURE Evaluation's approach of addressing health information systems holistically, working to integrate sometimes siloed data systems to provide a better look at the health sector landscape for improved decision making. The study intended to discover the FP data integration approaches being used by the private and public health sectors in Malawi, identify challenges, establish potential approaches that could improve data integration in the country's district health information system (which uses DHIS 2), and draw policy implications for the proposed data integration approaches.

**Methods:** A qualitative approach was used, incorporating both primary and secondary data sources in the analysis. Primary data were collected through key informant interviews (KIIs) at the national, regional, and district levels, and through field observations. The study targeted three main actors from the private sector: Christian Health Association of Malawi (CHAM) facilities; Banja La Mtsogolo (BLM) clinics, a Marie Stopes International (MSI) franchise; and Population Services International (PSI) and its franchising clinics and pharmacies. We conducted 71 interviews and analysed the data thematically.

**Findings:** Both private and public institutions make a significant contribution toward provision of FP services, even though they do not always provide the same FP methods. A system is in place for dataflow from private facilities to the nearest government facility for consolidation in monthly reports to be included in DHIS 2. However, this system faces multiple challenges—mostly involving private providers—such as noncompliance and inconsistent submission of FP data, shortage of data reporting supplies, poor data quality, and reporting delays. These challenges are a result of private providers feeling no obligation to share data with the district health office (DHO), incomplete data from private facilities providing limited FP services, insufficient funds for DHOs, and power shortages that hinder the use of DHIS 2. Another notable challenge was the lack of collaboration or trust between private FP providers and the DHO health centre, which strained the relationship and created an environment not conducive for sharing FP data. A shortage in the numbers of staff and their capacity also affects the data integration system.

**Recommendations:** To integrate FP data generated by private facilities in the government system, we recommend conducting periodic meetings between the DHOs and private hospitals to share data, instituting proper systems for consolidating shared data, and harmonizing the private health facilities' data management systems with the government system. Furthermore, the DHOs must take responsibility for encouraging private service providers to share their data for a minimum set of indicators. The policy implications of the suggested approaches include increased costs associated with improved collaboration between private and public facilities and the need to improve accountability mechanisms for data sharing at the DHO level—to include minimum sanctions, such as penalties or revoking licenses from those facilities that fail to share the FP data.

**Conclusion:** Because both public and private facilities provide FP services, FP data integration is an important step toward improving site-level health services, a goal shared by the Government of Malawi

and MEASURE Evaluation. FP data are not well integrated among the private and public providers in Malawi. Integration of data in the existing DHIS 2 platform is critical. Although the government is obliged to collect data from all providers, both public and private, the latter do not have a responsibility to send the data. The government must put in place mechanisms for private sector actors to comply, and these mechanisms must be budgeted for and accountability improved.

# INTRODUCTION

Malawi is one of 28 African countries that made commitments during the London Family Planning Summit (FP2020) in July 2012 to achieve an mCPR of 60 percent by 2020—up from 33 percent (Government of Malawi, 2015). The Malawi Costed Implementation Plan for FP 2016–2020 provides the blueprint for how this will be achieved. Like any program, monitoring and evaluation play a vital role in tracking progressive achievements towards the set goal. For example, the 2016 review of progress indicated that the mCPR was 45 percent, which represented 0.8 percent annual growth, lower than the expected rate of 3.7 percent needed for Malawi to achieve its mCPR goal (Malawi FP2020 Progress Report, June 2016). However, a challenge emerged regarding the nature of the available data. Although data sources supposedly included both public and private health service statistics, DHIS 2, the main data source for the FP progress report, does not completely capture this data, because it lacks most service statistics from private providers. Therefore, with this significant exclusion, the progress report does not give a true picture of the FP situation in Malawi.

The private sector, which provides up to 40 percent of health care in Malawi, is composed of private non-profit providers, private for-profit providers, and professional associations (Sustaining Health Outcomes through the Private Sector [SHOPS] Project, 2012). Nearly three-quarters (564) of private facilities offer at least one FP method (SHOPS Project, 2013). Ideally, FP data from all these facilities, including the outreach clinics, should be submitted to the nearest government health facility to be integrated with the facility's data and recorded in DHIS 2. But this is not the case. A 2009 assessment report of Malawi's HIS, conducted by the Malawi Ministry of Health (MOH) with the Health Metrics Network, found that although HIS resources (policy and planning), essential health indicators, and data sources were described as adequate, vital statistics and data management at the national level were present but inadequate (MOH 2009). This was attributed to lack of a national data warehouse, failure to use unique identifiers, and absence of a meta-data dictionary.

While Malawi's national-level health management information system (HMIS) is integrated, separate health information subsystems operate independently at the district level. In addition, the Malawi FP2020 core group identified lack of private sector data integration as a big challenge, warranting prioritization for remedial action, for Malawi to effectively track its FP2020 progress (FP2020 Consensus Building Minutes, April 2016).

Two FP2020 commitments that Malawi made at the London Summit were to increase coverage of services through the expansion of private/public partnership (Commitment 3) and strengthen forecasting and data management for effective supply chain operations (Commitment 5). To ensure that all efforts are considered in assessing progress towards FP2020 and these commitments, FP data from private health facilities must be properly integrated in the national HIS. It is against this background that the study sought to understand the factors underlying current FP data integration practices between private and public health facilities, with the aim of providing recommendations for improving FP data integration.

## Research Objectives

The primary research question was, how can the prevailing FP data integration approaches between the private and public sector be best organised to improve the national HIS? The study answered the following research questions:

- A) How do FP dataflow within the private sector, from service delivery points to the national level?
- B) What are the current FP data integration approaches, in Malawi, between the private and public health sectors?
- C) What are the challenges with the current data integration approaches?

- D) What approaches could be used to improve data integration?
- E) What opportunities does DHIS 2 offer for private sector data integration?
- F) What are the policy implications of the proposed data integration approaches?

# METHODS

## Study Design

The study employed a qualitative approach, utilising both primary and secondary data. Primary data were collected through KIIs and field observations. Secondary data were collected from national- and international-level documents.

## Study Population and Sampling Strategy

The study interviewed 71 key informants (37 women and 34 men). In the public sector, three key informants were selected from national-level institutions of the MOH: Reproductive Health Department (RHD), Planning and Policy Development Department, and the Central Monitoring and Evaluation Division (CMED). At the tertiary level, four key informants were sampled from zonal offices of the five quality control divisions (i.e., zones) in Malawi. At the district level, interviews were administered to 21 FP service providers, HMIS officers, health surveillance assistants, FP coordinators, and data clerks.

The main actors in Malawi's private sector are nonprofit providers, for-profit providers, and professional associations. This study excluded professional associations and focused on the public, nonprofit, and for-profit providers of FP services, including pharmacies. The private sector FP players sampled included CHAM, with 172 facilities, and BLM, a MSI franchise with 31 static clinics and 364 community outreach service points. Another notable player is PSI, which also supports FP services through franchising agreements and outreach services. In the private sector, seven interviews were conducted at the national level, 21 at the district level, and 15 interviews were conducted with pharmacists.

The research was conducted in all three regions of the country, with the objective of understanding variations in the practice of data integration. This type of sampling facilitated the comparison of both regional and institutional practices. Additionally, to understand the practices of small, for-profit facilities, random sampling was used to select from a list of private facilities in each district.

Table 1, below, provides details of the study sites across the regions.

**Table 1. Study sites**

KII Level	Primary		Secondary		Tertiary		National		Pharmacies	Total
District	Public	Private	Public	Private	Public	Private	Public	Private	Private	
<b>Southern Region</b>										
Blantyre	2	4	1	1	1	1	1	0	2	<b>13</b>
Zomba	1	2	2	0	2	0	0	0	3	<b>10</b>
<b>Central Region</b>										
Lilongwe	2	3	1	2	1	1	2	4	3	<b>19</b>
Dowa	3	4	1	0	0	0	0	0	2	<b>9</b>
<b>Northern Region</b>										
Nkhatabay	3	2	1	0	0	0	0	0	2	<b>8</b>
Mzuzu	4	3	1	0	0	1	0	0	3	<b>12</b>
<b>Total</b>	<b>14</b>	<b>18</b>	<b>7</b>	<b>3</b>	<b>4</b>	<b>3</b>	<b>3</b>	<b>4</b>	<b>15</b>	<b>71</b>

## Data Collection

Primary data were collected between March and April 2017. Interviews were conducted using a semi-structured interview guide that was developed based on the study objectives. The questions in the guide were organized in two parts: one for policy makers (national-level and key informants from the district

management teams) and one for service providers. The interviews were face-to-face, audio recorded, and transcribed verbatim. The interviews focused on understanding the practices for integrating FP data by each of the sampled facilities, taking keen interest in best practices.

The study carried out field observations to review FP service data as it appeared in the sampled facility records and to trace the data integration route from the private facility to the public facility, and ultimately to DHIS 2, while comparing records at each point of aggregation. The team reviewed the tools that were being used for the data integration. The field data collectors were trained prior to data collection. The training focussed on interviewing techniques, ethical conduct in the field, and familiarisation with the data collection tools.

Secondary data collection was done through desk reviews of all national policy documents currently used as guides on FP data and data collection. They included the following: Malawi CIP for FP (2015); Malawi National Health Information System Policy (2017); Malawi Sexual and Reproductive Health Policy (2009); Malawi National eHealth Strategy 2011–2016 (2015); HMIS-National Strategy and Implementation Plan (2009) (looking particularly at guidelines for HMIS related to sexual and reproductive health and FP); Malawi's Annual Track 20 Progress Report (2016); and RHD's biannual monitoring and evaluation quarterly supervision reports (2016). Reviewing policy documents afforded an understanding of the data management policy framework in Malawi, and the integration process of private sector data from private facilities to the national level. The desk review findings were compared with the findings from the KIIs and field observations to single out strengths, weaknesses, and opportunities to improve data integration between the private sector and government facilities.

## **Data Analysis**

Transcripts were reviewed electronically and manually analysed for themes in relation to the study objectives. Content analysis generated a list of key themes. The themes identified were used to code the data. To ensure inter-coder reliability, two data analysts were involved. In an iterative process, the study team continuously discussed emerging themes and subthemes to find consistencies and differences and to synthesize them according to the project objectives.

## **Ethical Considerations**

The study was approved by the Malawi National Health Science Commission ethics review committee. Participation in the study was entirely voluntary. Before any involvement in study-related procedures, written informed consent was obtained from the participants after a thorough explanation of the purpose and procedures of the research.

# RESULTS

## Family Planning Services Offered

There are similarities in the types of FP services offered in private and government facilities across the three levels of health facilities. In both private and government facilities, tertiary and secondary facilities provide the full range of FP services (i.e., provision of short-term methods, provision of long-acting reversible methods and permanent methods, and counselling and referrals). In some government primary-level facilities, complex services (such as bilateral tubal ligations and insertion of intrauterine contraceptive devices) are offered by private providers who visit these facilities as part of outreach services.

## Data Sources, Entry, and Management

Family planning dataflow was assessed within the private and public sectors, from the service delivery point to data entry and management, to identify current FP data integration approaches. In both settings, a data clerk, receptionist, or service provider (nurse or clinician) collects the data using an FP register supplied by either the DHO, in public facilities, or a franchise sponsor, in private facilities. At the end of each month, the data for that month are consolidated and recorded on a designated paper form before the hard copy is sent to the DHO or franchise sponsor.

The private franchises have their own specialized data tools, forms, and systems for reporting to their donor. The facility in-charge compiles the data. Using an electronic standardized form, each month the primary-level private clinics compile a data summary that is sent to their sponsor or the sponsor's headquarters office. They then compile another paper-based form that comes in triplicate: one copy is submitted to the franchise sponsors; one copy is sent to the DHO; and the last copy remains in the facility. However, the lower-level private clinics do not consistently send copies to the DHO. Likewise, most of the secondary-level private facilities reported not sending their reports to the DHO. This contrasts with the government facilities where data from the register are copied to the reporting forms and submitted to the FP coordinator, who then sends them to the HMIS office of the DHO for data entry, analysis, and verification. The forms are then entered in DHIS 2, a computerized web-enabled platform that automatically integrates health data from across the country.

## Data Transfer Procedures and Protocols

A protocol is in place to allow data from private facilities to be integrated in the public-sector data management system. In this protocol, all data from private facilities is to be submitted to the nearest government facility for consolidation in the facility's monthly reports. The reports generated from the government facilities are sent to the DHO through ambulance or walk-in. The reports received at the DHO go straight to the HMIS office where the facility data are entered in the web-based software, DHIS 2, which can be accessed by the FP coordinator or anyone with a password.

Both government and private facilities reported using a combination of electronic and hard copy data collection and management. However, the private facilities reported a preference for electronic data recording, management, and transfer because it allows more data security, aids in production of monthly summaries, and facilitates tracking data trends and data sharing. The electronic methods used by private facilities to share data are specially designed databases. Private facilities also use emails and mobile phones to transfer and share data, backing them up with hard copies at a later stage. Conversely, the government facilities reported using hard copies for data recording and transfer. In terms of data management, the government HMIS has two methods of storing data: filing hard copies in well-labelled arch files and DHIS 2.

Government health facility workers and HMIS officers at all study sites reported being aware of quality assurance procedures, in the government data management system, that help to maintain comprehensive and quality data. The procedures include following up with non-reporting facilities through phone calls, physical follow-ups, and automated notifications in DHIS 2, when there is incomplete data entry. The notifications, which are referred to as a reported summary, are programmed in DHIS 2 to remind the HMIS officer which public facilities have not reported after the end of the month. DHIS 2 has other built-in quality assurance functions, such as issuing an alert when an alarming figure or outlier is entered in the system.

Despite the presence of a data integration protocol between private and government facilities, the practice is different. Most of the government health workers reported that getting private facilities to share reports is a very big challenge, with few facilities being compliant. One of the main reasons given for the private practitioners' noncompliance was the perception that, since they do not collect FP commodities from the DHO, the data they collect do not belong to the DHO. Most private practitioners attributed the noncompliance to lack of coordination and a poor relationship between the government and private facilities. One private service provider reported the following:

*I know we are supposed to be sending data to the HMIS department, but it's not just the matter of sending, there is a need of linking, and collaboration. That's what I actually believe. I am in the health system; I know what actually happens. There is supposed to be collaboration.*

Another respondent from a private franchise clinic in Blantyre reported the same:

*When we have compiled the data each month we have a summary, and that summary is sent to our headquarters. Yeah, that's all, it's sent to our headquarters. The government has never asked me; of course, I have never sent them any data, no.*

Both the government and private-practice service providers reported that private-practice service providers do not share their data, but rather send it directly to their organization's supporting central offices, according to their respective franchise's protocol. A few bigger private hospitals reported sending reports to the DHO every month but complained that they do not get feedback. The government health workers expressed concern that this practice is leading to underreporting of FP data, as an FP coordinator in a district in the southern region lamented:

*There are some other private clinics; they are not sending their reports. Yes, so as a result, it means as a district we are underreporting.*

A private clinic owner from the same district echoed the concern, which he attributed to lack of involvement of private practice service providers by the DHO:

*Whenever they have trainings, or whatever is taking place, they don't involve us. Now, there is need for them and us to work together, uhm, if we have to improve the system, especially on the data collection and data management. There is need for us to work together. Otherwise we are working independently; they are doing their things as well.*

## **Challenges with Current Data Integration Approaches**

When asked about the challenges experienced with the current data integration approach, both government and private service providers reported several. The most cited challenges by government health workers, concerning the private health facilities, included not sharing data, poor quality data, late submission of reports, inability of DHOs to conduct regular supervisory visits to private facilities, and private providers' lack of interest in involvement in DHO activities. Almost all the district FP coordinators interviewed complained that, even for the few facilities that submit their data, most of the data are of poor quality. Incomplete data is another issue, because, either the facilities provide limited services or have limited data-management capacity.

The HMIS officers and public-sector health workers also noted challenges within their system. The most commonly cited challenges within the public sector were the problems with physically going around to facilities to collect reports; power blackouts, which affect the management of DHIS 2; shortages of reporting forms, because they rely on the headquarters to supply them; inadequate data management personnel; and poor capacity of nurses and HMIS officers to manage the data.

The private sector health workers' perspectives of challenges related to data integration were in accordance with the observations made by their counterparts from the public sector. For instance, more than half of the facilities reported sending their data to their office or franchise sponsors and seldom shared data with their respective DHOs. Other challenges mentioned included poor or no relationship with the DHOs, low capacity to manage data, and inability of DHOs to provide FP registers. The private service providers acknowledged that the challenges they experience contribute to poor quality of data as noted by the following private service provider respondents:

*I would love to see the coordinator so that we can liaise on our problems like how to polish up some areas. Maybe we are backwards, we don't know. For us we are doing better, but for the reporting system to the DHO, we don't know. I think there are some areas which we lack most because there must be a family planning register. I even wrote them to ask for this register, but there was no reply. So how can we send good-quality data to DHO because it is different from what we have.*

*There are times when we run out of registers, like here in Zomba, when we ask for that kind of registers, we are told to pick them from Blantyre DHO. And it means, if I don't have a trip to Blantyre, then I have to wait till I have a trip, which might come a week or two weeks later. It means the data that I was supposed to collect within that period is lost.*

# DISCUSSION

## Family Planning Dataflow from the Private Sector

Private health service providers range from a single, stand-alone provider interfacing directly with clients to a team of providers in complex organizations with several levels—including community, district, and national. A common feature for both large and small providers is the source of FP data, which is the service delivery point at the community level. For small, stand-alone private service providers, FP data are supposed to be collected and deposited at the nearest public health facility. This could be a rural health facility or a district health facility. Using a catchment area approach, each service provision point is affiliated with a specific public health facility. For larger, multilevel private facilities, the dataflows from the collection point to the national headquarters of the organization where it is aggregated to guide program implementation.

## Data Integration Approaches

The study found three major approaches being used in Malawi for data integration. The first approach uses a uniform data collection tool for private and public health providers. The data collection tool we reviewed included all the FP methods that were being offered at the time of the study, including natural FP methods. The RHD collaborates with the CMED in designing and approving national data collection tools for its reproductive health programs, including FP. CMED supports coordination of data collection, consolidation, and analysis. Through monitoring visits, the RHD and CMED ensure that the correct forms are utilized for data collection for both public and private actors. A lot of data are collected at the primary level by individual facilities, but there is no integration (private to public), because at this level most of the data are raw, meaning they have not been cleaned, aggregated, or analysed.

The second data integration approach uses a catchment area approach. Each service delivery point falls within the catchment area of a single public health facility area. The lowest distinguishing element of the catchment area system is the health centre. In theory, there is a clear demarcation preventing a service delivery point from falling under more than one health centre. Data from a private doctor in the catchment area, for example, are sent to the nearest public facility or health centre for integration in DHIS 2.

The third integration approach chooses a single integration level. For Malawi, data are integrated at the district level through the DHO. Regardless of the size and level of the health service provider, their data are sent from the health centre to the DHO for consolidation. The FP coordinator is the point of contact at the district level. They are responsible for collecting data from all facilities, including public and private, and following up on missing or incomplete data. This point is where most of the data are missed. Most private facilities, including pharmacies, do not remit their reports to the DHO for consolidation.

At the district level, the FP coordinator is responsible for collecting data and sharing them with the HMIS office where they are entered. At the time of the study, the HMIS Office was responsible for entering the data in DHIS 2. Family planning data constitutes a small part of the routine sexual and reproductive health data that are collected for all national health indicators.

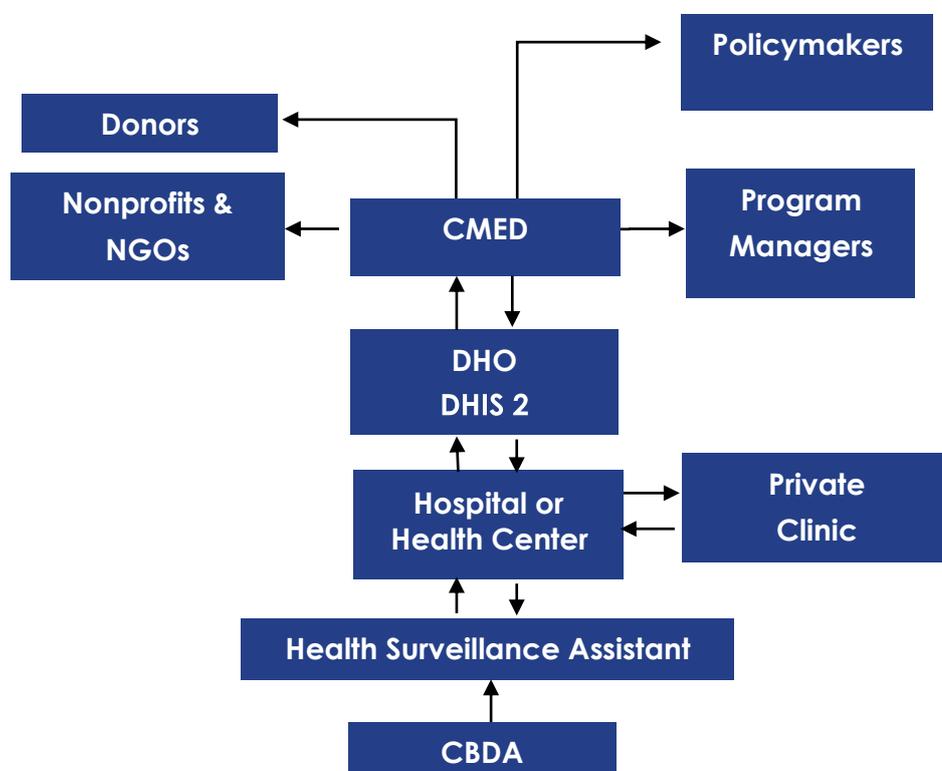
There are nationally set deadlines for reporting, i.e., the DHO should send the previous month's report to DHIS 2 by the fifth day of each month. There are big challenges in timely submission of these reports, especially delays caused by community-level data collectors and facilities that are hard to reach—owing to poor road networks and poor or no access to the internet or a cellular network. The private sector is not spared these challenges. Some private entities attribute the late submission to internal report schedules that do not correspond to the government's timetable. Late, submission may be interpreted as no submission. DHIS 2 automatically updates the available data when the deadlines are met.

## Family Planning Dataflow: From Service Provider to Policymakers

Family planning data are generated at the service delivery point. In the public health system, this service delivery point could be a community-based distribution agent (CBDA), a health surveillance assistant, a health facility, a district hospital, or a referral (or tertiary) hospital. As described above, the link for all community and primary data sources is at the health-facility level, in the case of stand-alone facilities. These data are added to the health-facility service statistics, reported to the DHO, and entered in DHIS 2. This enables disaggregation of data by health facilities.

Figure 1 is a simplified version of the FP dataflow. Although the CBDA is the first point at which data are formally reported, services are provided and data are generated at even lower levels. For example, if a CBDA has provided condoms to traditional birth attendants in their catchment areas, they will gather the distribution data from the birth attendants and include these data in a monthly FP report.

**Figure 1. Dataflow**



## Challenges with the Prevailing Data Integration Approaches

The first challenge with the data integration approach outlined above arises from the relationship between the public health sector and private health facilities. Both private and public health institutions in Malawi are under the MOH. The relationship includes collaboration and management. However, private health facilities lack this established relationship. Because private institutions have their own commodity procurement modalities, private service providers do not see the logic of providing service delivery data to the public catchment health facility or DHO. The study respondents estimated that not even half of the data generated in private health facilities get reported, mainly because private facilities are overburdened with reporting. (One respondent said it's too much paperwork to report to their employer or donor and the government.) The key informants said that the government provides the reporting

forms, only, not proper training. The government acknowledges that most trainings are conducted for public-based providers, but it has started training private providers at the district level.

The second challenge hinges on the capacity of private health facilities to aggregate data from registers, as well as that of the FP coordinators at the DHO, to follow up on reports. For private health facilities, staff must prioritise activities they think are important to the institution, and they do not typically prioritise the sharing of reports and data with public facilities. This, combined with the absence of a pull factor from the DHO (because of their inability to follow up on reports) results in late submission of reports, submission of partial reports, or submission of no reports, at all.

The third challenge puts the other two prior challenges in perspective: a “weak culture of collaboration.” Even though most of the health service providers work within the same catchment area, there is weak culture of collaboration between private and public health service providers. In some services, there’s even a hostile attitude among some public health service providers towards clients who have been receiving services from private health facilities. These negative attitudes permeate the whole range of public-private service provision and negatively affect service data collection. Likewise, poor or no feedback on data, from the public sector to the private sector at all levels, fosters miscommunication and a communication gap, negatively affecting the need for and confidence of the private sector to remit reports.

The fourth challenge relates to the management of DHIS 2 at the district level. Because of increased frequency of power outages, data cannot be entered on time. Thus, program managers and policy makers do not have access to these data in time to support policy making or make mid-course corrections. This is especially important as Malawi is working to achieve its FP2020 goals.

# RECOMMENDATIONS

## Potential Approaches to Improve Data Integration

Based on the challenges discussed above, the study proposes four potential approaches to improve data integration.

The MOH must enhance collaboration and coordination with private sector actors at all levels. This will result in strong relationships and trust and will facilitate the sharing of data between the two parties. One potential way to strengthen these relationships is by actively encourage the Association of Private Health Facilities hold their members accountable for sharing service delivery data with the government. The government should provide necessary training in data management and conduct scheduled mentorship and supervision of these private facilities. If a private health facility in one district requires a new FP register, this task should not be referred to the regional office; rather, the district FP coordinator should be able to provide them. This calls for the transformation of the relationship between private and public health facilities, to be more participatory than theoretical. Therefore, there is a need for the government to open up dialogue on how issues of data integration can best be addressed or enhanced.

The second potential approach to improving data integration is to introduce data sharing through existing district health review meetings already attended by members of various health programmes. This data sharing should highlight key challenges, not just for FP data, but, for all health services data, because the chances for success will be higher if approached from a holistic perspective. Private sector actors should be actively engaged in these reviews and the meetings should have clearly agreed-upon action points for improvement.

Thirdly, because DHIS 2 is web-enabled, controls on who has access to the database should be liberalised. This means that private health facilities, including pharmacies and small clinics, should be provided with user privileges. This would ensure that all health data generated at the service delivery point, including FP data, are entered directly and on time. This will overcome the issue, raised by private practitioners, of lack of feedback from reports submitted to the government.

Finally, given the challenges currently being experienced, a participatory system-strengthening approach should be taken. This approach, known as DIVA (Diagnose-Intervene-Verify-Adjust) has already been used in Malawi to monitor the essential health package (which includes reproductive health) championed by the United Nations Children's Fund (UNICEF). In collaboration with the MOH, UNICEF implemented a district health system strengthening activity. The approach aims to strengthen district health systems and is designed to involve all levels of these systems. It is a flexible, outcome-based, four-step approach, with user-friendly tools to identify and respond to health system and demand-side bottlenecks (UNICEF & Management Sciences for Health, 2012). A similar activity can be implemented focussing on FP, particularly at the district level. The advantage of this approach is its ability to work with service providers to collect, analyse, and interpret data. It shows where bottlenecks are in the system and provides an opportunity to discuss how they can be eliminated.

## Policy Implications of the Proposed Data Integration Approaches

A key challenge with data integration is the following view on the part of private practitioners: since the government does not provide commodities to their health facilities, it should not demand private facilities report on their services. Health facility activities—public and private—are regulated by institutions sanctioned under Malawi's laws. Thus, private providers do not operate in a vacuum and are accountable to the Malawi MOH. Data reporting should be an obligation rather than an option. To formalize this, there is a need for private health providers to enter in a memorandum of understanding with the MOH to ensure that reporting obligations that come with running a health institution are accepted.

With the decentralized government system in Malawi, districts have the power to make decisions. District decision makers need to put in place a strong supervision system for the private sector, to encourage private practitioners to comply with data integration. Ideally, the district FP coordinator is responsible for supervising all FP services in the district. However, as the study discovered, supervision visits to private facilities were scarce; in some cases, the providers did not even know the FP coordinators in their districts. Improving supervision visits is likely to improve data submission rates through the mentorship provided during supervision, because the lack of feedback from the DHO plays a role in the low submission rates.

The MOH should allow private practitioners to enter reports directly in DHIS 2 instead of going through the nearest government health facility. Use of paperless technology for reporting should be encouraged for private health facilities.

## CONCLUSION

The study focused on two FP2020 commitments Malawi made at the 2012 London Summit, particularly Commitment 3, Increase coverage of services through the expansion of private/public partnership, and Commitment 5, strengthen forecasting and data management for effective supply chain operations. The study illustrated that much more has to be done to track and achieve the set target for mCPR.

The study further revealed that FP data is not well integrated among private and public providers in Malawi. Though the government, through the DHO, is obliged to collect data from all private providers, the latter also have responsibility to send the data. For data to be integrated, workable and cost-effective mechanisms are critical. These include periodic meetings, sharing of data electronically, and capitalizing on available platforms, such as joint trainings to share data on FP. However, such approaches have cost implications. Hence, the DHO's FP data integration approaches ought to be budgeted for so that resources are allocated to ensure this issue is given the attention it deserves.

## REFERENCES

- Government of Malawi. (2017). *Demographic and health survey, 2015–2016*. Lilongwe, Malawi: Government of Malawi. Retrieved from <https://dhsprogram.com/pubs/pdf/FR319/FR319.pdf>
- Government of Malawi. (2015). *Malawi costed implementation plan for family planning, 2016–2020*. Lilongwe, Malawi: Government of Malawi. Retrieved from [https://www.healthpolicyproject.com/ns/docs/Malawi\\_CIP\\_FINAL.pdf](https://www.healthpolicyproject.com/ns/docs/Malawi_CIP_FINAL.pdf)
- Government of Malawi. (2014). *Malawi national ehealth strategy, 2011–2016*. Lilongwe, Malawi: Government of Malawi. Retrieved from [http://www.who.int/goe/policies/malawi\\_ehealth\\_strategy2011\\_2016.pdf](http://www.who.int/goe/policies/malawi_ehealth_strategy2011_2016.pdf)
- Government of Malawi. (2015). *Malawi national health information system policy*. Lilongwe, Malawi: Government of Malawi. Retrieved from [https://www.healthdatacollaborative.org/fileadmin/uploads/hdc/Documents/Country\\_documents/September\\_2015\\_Malawi\\_National\\_Health\\_Information\\_System\\_Policy.pdf](https://www.healthdatacollaborative.org/fileadmin/uploads/hdc/Documents/Country_documents/September_2015_Malawi_National_Health_Information_System_Policy.pdf)
- Sustaining Health Outcomes through the Private Sector (SHOPS) Project (2012). *Malawi private health sector assessment*. Bethesda, MD: SHOPS Project, Bat Associates; Washington, DC: United States Agency for International Development. Retrieved from <http://www.hanshep.org/resources/shops-country-private-sector-health-assessments/malawi-private-health-sector-assessment>
- Sustaining Health Outcomes through the Private Sector (SHOPS) Project (2013). *Malawi private health sector mapping*. Bethesda, MD: SHOPS Project, Bat Associates; Washington, DC: United States Agency for International Development. Retrieved from <https://www.shopsplusproject.org/sites/default/files/resources/Malawi%20Provider%20Mapping%20Report.pdf>
- Kachapila, M. (2016). *Are we making progress?* PowerPoint presentation made at the Consensus Building Workshop on 31 May 2016.
- UNICEF & Management Sciences for Health (MSH). (2012). *Strengthening district management capacity for planning, implementation and monitoring for results with equity*. New York, NY: UNICEF; Medford, MA, USA: MSH. Retrieved from [http://ccmcentral.com/wp-content/uploads/2014/04/DIVA-Guidebook-Strengthening-district-mgmt-for-results-with-equity-UNICEF-MSH\\_2012.pdf](http://ccmcentral.com/wp-content/uploads/2014/04/DIVA-Guidebook-Strengthening-district-mgmt-for-results-with-equity-UNICEF-MSH_2012.pdf)

# APPENDIX B. QUESTION GUIDE



## MEASURE Evaluation Project

---

### Question Guide

#### Key Informant interview guide:

*“Public/Private Health Facilities Family Planning Data Integration Approaches in Malawi: How supportive are current approaches to FP2020 Goals?”*

#### 1. Demographic details

Date of interview: \_\_\_/\_\_\_/\_\_\_\_\_ Name of Institution: \_\_\_\_\_

Interviewer’s name: \_\_\_\_\_

#### 2. Type of family planning services

2.1 Please, tell me about the type of family planning services offered at this facility. (a *List* of all services provided pertaining to family planning)

- a.
- b.
- c.....

(Allow for “*Don’t Know*”? answer)

2.2 What other private/public facilities offer family planning services within the district? (*List*)

- a.
- b.
- c.....

#### 3. Data sources/entry

3.1 Does the facility have specific tools for recording information on services for family planning

If Yes, *List* the tools. (Please TICK)

If No, (*any follow up questions?*)

- a. Integrated RH monthly reports
- b. FP register
- c. YFHS register
- d. Others ..... (*Specify*).

3.2 What methods does this facility use to record/keep data?

- a. Electronic
- b. Paper/ Hard copy
- c. Others ..... (*Specify*).

(Allow for “*Don’t Know*”? answer)

#### 4. Data Aggregation

- 4.1 From the methods mentioned in 3.2, how is data aggregated at this facility?
- 4.2 Does the facility get information on family planning from *elsewhere*? If YES or NO (*from where/where do you expect?*)
- 4.3 From the list of data source mentioned which one do you prefer (*why*)
- 4.4 What type of data? (*What are the possible answers to this question?*)
- 4.5 In what *form* does the facility get this data from *elsewhere* (4.2 above)? (*List* the possible ‘forms’)
- 4.6 Who receives the data?
- 4.7 Who put the data together? (*List* the possible ‘recipients’) from elsewhere and facility
- 4.8 In what *form* is the data compiled? (*List* the possible ‘forms’) from facility and elsewhere

## 5. Data transfer procedures/protocol

- 5.1 From here, where else does this data go? (*List* possible data ‘destinations’)
- 5.2 In what form is data transferred to these destinations?
- 5.3 How long does it take from this point to get to that end? (What are the *significant* time gaps...days/week/month/year/*never*?)
- 5.4 What specific procedure(s) do you follow in *receiving* data? (What *procedures* are possible?) (probe all stages)
- 5.5 What specific procedure(s) do you follow in *sending* data (What *procedures* are possible?) (Probe all stages)
- 5.6 What relevant document/protocols/reference materials/policies do you know that specifies *how* family planning data should flow from one point to next? (What *documents* are possible /acceptable?)
- 5.7 What implications do these policy/documents/protocols/reference materials have on data integration processes? (Explain them in details if possible/ give *recommendations* if possible?)
- 5.8 How is family planning data from this facility included in the DHIS II?
- 5.9 Do you have specific forms that you use to share your data With MOH?
- 5.10 What challenges do you have in sharing your family planning data with MOH for integration into DHIS II?  
  
*Specific to national level key informants*
- 5.11 Does the country have stand-alone policies or protocols or strategies that stipulate private facilities FP data integration into public data?  
(Probe for specific *documents* what are they? Probe for relevant documents)
- 5.12 Do you think the country has all the necessary policies/documents/ guidelines to address FP data integration? (*Probe what the respondent thinks are additions or specific issues in the documents*)
- 5.13 How were the stakeholders involved in the various stages of policy/strategy/protocol development?

(Probe on adequacy of involvement, what structures, plat forms were used e.g., *technical working group*)

- 5.14 What do you think are the gaps in the engagement/involvement process and how do you think this can be addressed in future?
- 5.15 Are the policy/protocol/strategy provisions on FP data integration being implemented?
- 5.16 What are the strength in the implementation of policy?
- 5.17 What are the barriers to implementation of policy?
- 5.18 and how can the barriers be addressed?
- 5.19 What could be your general recommendations for addressing policy related issues pertaining to integration of FP data for private and public sector?

## **6. Knowledge, practice and recommendations**

- 6.1 What specific training have you ever undergone on Family planning data aggregation/management?  
Yes / No

If Yes, (Probe on best practices and any practice unique to the institution)  
If No, (*any follow up question....?*)

- 6.2 For data flow within the health system i.e. private and public, what do you think are the strengths?
- 6.3 What do you think are the gaps/weaknesses in the way data flow between the public and private sector?
- 6.4 How do you think these weaknesses can be addressed?
- 6.5 Based on your experience, what works for FP data integration
- 6.6 What could be opportunities in the way data flows within the health system?
- 6.7 What support if any in particular may you require in this facility to improve FP data management to facilitate integration?
- 6.7 In conclusion, what would be your recommendations to improve data aggregation between public and private sector?
- 6.8 Do you have anything to say pertaining to family planning data integration?

# WORKING PAPER

**MEASURE** Evaluation  
Carolina Population Center  
University of North Carolina at Chapel Hill  
123 West Franklin Street, Suite 330  
Chapel Hill, North Carolina, USA 27516  
Phone: +1 919-445-9350

[www.measureevaluation.org](http://www.measureevaluation.org)

This publication was produced with the support of the United States Agency for International Development (USAID) under the terms of MEASURE Evaluation cooperative agreement AID-OAA-L-14-00004. MEASURE Evaluation is implemented by the Carolina Population Center, University of North Carolina at Chapel Hill in partnership with ICF International; John Snow, Inc.; Management Sciences for Health; Palladium; and Tulane University. Views expressed are not necessarily those of USAID or the United States government. WP-18-209

