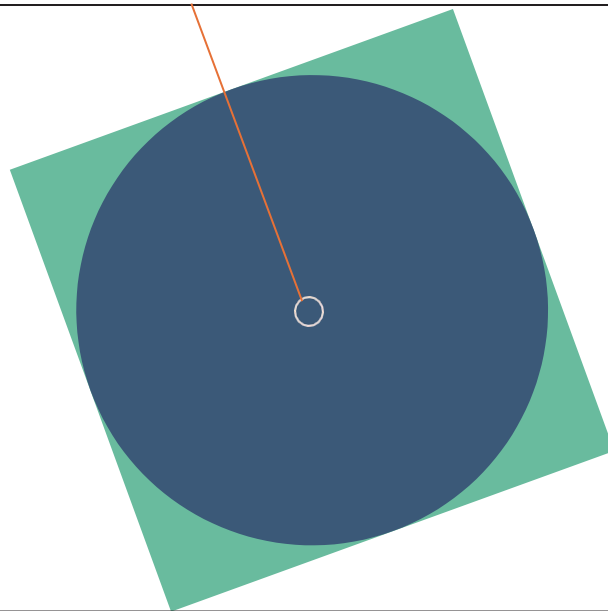


Working Paper

November 2024

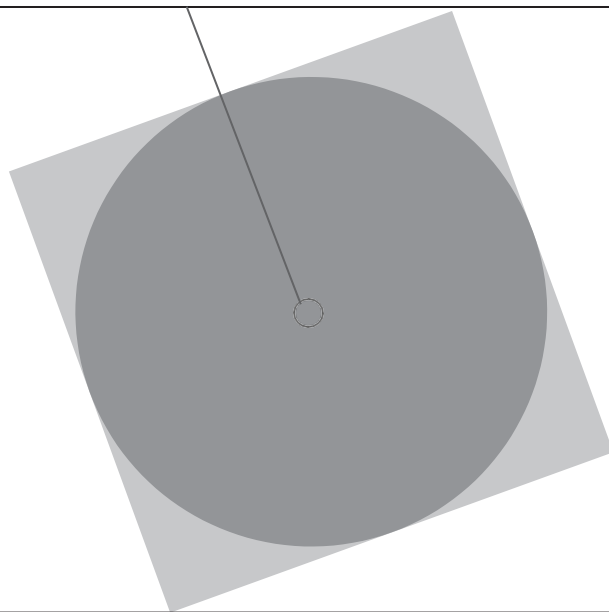
Assessment of Age Disaggregation in Routine Family Planning (FP) Data



Assessment of Age Disaggregation in Routine Family Planning (FP) Data

Data for Impact (D4I)

University of North Carolina at Chapel Hill
123 West Franklin Street, Suite 330
Chapel Hill, North Carolina 27516 USA
Phone: 919-445-6949
D4I@unc.edu
www.data4impactproject.org



Contents

Contents	3
Abbreviations	4
Introduction	5
Methods.....	6
Review of DHIS2 Data Collection Forms	6
KIIs.....	6
Data Analysis.....	7
Findings.....	8
DHIS2 FP Data: Collection, Quality Assurance, and Use	8
DHIS2 FP Data: Age Disaggregation	12
What have M&E officers recommended?	18
Conclusion	20
References.....	24
Appendix	25

Abbreviations

CIP	costed implementation plan
D4I	Data for Impact
DGFP	Bangladesh's Directorate General of Family Planning
DGHS	Bangladesh's Directorate General of Health Services
DHIS2	(formerly) District Health Information Software
DRC	Democratic Republic of the Congo
DSS	Burkina Faso's Directorate of Sectoral Statistics
e-MIS	electronic Management Information System
FP	family planning
GAMA	Global Action for Measurement of Adolescent Health
HIPs	High Impact Practices
HIS	Health Information System
IUD	intrauterine device
KII	key informant interview
LMIS	Logistics Management Information System
M&E	monitoring and evaluation
MIS	Management Information System
NGO	nongovernmental organization
SDGs	Sustainable Development Goals
WHO	World Health Organization

Introduction

Family planning (FP) indicators are essential to monitor and evaluate progress toward maternal and child health outcomes.¹ A critical component of these indicators is age data, which helps identify specific FP services needs of different age groups, particularly those at highest risk of unintended pregnancy, such as adolescents and youth.^{2,3,4,5,6} Although key FP indicators are well established, the practice of age disaggregation within Health Information Systems (HIS) varies and is not consistent across countries.^{1,7} The choice of age disaggregation has a direct impact on how data are analyzed, interpreted, and used, and consequently, it can affect resource distribution, FP program design and implementation, as well as the efficacy of addressing population needs.

Figure 1. Countries participating in the assessment



A lack of appropriately disaggregated data can lead to an inaccurate understanding of FP service needs, ineffective and inefficient resource allocation, and programs that are not tailored to meet the diverse needs of various age demographics, especially adolescents and youth. This limitation not only impacts our understanding of current FP needs, but also which segments of the population

are underserved or missed fully. Without these insights, decision makers and stakeholders cannot design and implement effective FP policies and programs that address age-specific health disparities, accurately measure the impact of FP programs on different age groups, or ensure accountability in delivering FP services across all age segments, particularly at the subnational level.^{8,9,10}

Additionally, the structure of age disaggregation impacts the management of the HIS itself. Excessive and irrelevant age categories may overburden the system and result in less analysis and use of the data. Therefore, the challenge for a country's HIS lies in adopting an age disaggregation approach that aligns with both its information and system needs.

The [Track20](#) project supports governments to collect, analyze, and use routine data to track their annual progress in FP and improve their FP strategies and programming. The implementation of this initiative raised important questions about the variability in age disaggregation: What factors influence decisions on age disaggregation? How does a specific approach to age disaggregation affect the analysis and use of FP data? Additionally, what impact does the choice of a particular age disaggregation have on the efficiency of the system itself?

In response to these questions, [Data for Impact](#) (D4I) undertook an assessment of the practice of age disaggregation of FP data in the DHIS2 (formerly District Health Information Software) platform among countries engaged with Track20. The assessment sought to explore several areas: the processes for collecting FP data within DHIS2, how the data have been used and reported, the decisions made regarding the structuring of age data, and the impacts of the existing age disaggregation on data interpretation and use, including implications related to adolescent and youth data. The assessment identifies current practices in Ministries of Health across countries while acknowledging that these practices are evolving and may not yet fully align with global recommendations or best practices.

Methods

The assessment used a mixed-methods approach that combined a desk review of DHIS2 data collection forms across multiple countries participating in the Track20 project with key informant interviews (KIIs) with monitoring and evaluation (M&E) officers involved in FP data management and analysis within these countries. This approach allowed D4I to gather information from existing data collection forms and supplements and validate them with insights and perspectives from key informants who have knowledge or expertise on the DHIS2 FP data.

Review of DHIS2 Data Collection Forms

The D4I team collaborated with Track20 and other partners to access DHIS2 data collection forms for the review. These forms are the standardized electronic or paper-based forms that are used within national DHIS2 systems and designed to collect data on various health indicators, such as disease prevalence, FP use, and immunization coverage, among others. The DHIS2 data forms are generally tailored to the needs of individual countries or health programs and are used at various levels of the healthcare system, from community health centers to national Ministries of Health, to facilitate data-driven decision making and monitor the performance of health programs.

The team was able to obtain and conduct a document analysis of DHIS2 FP data collection forms from 14 countries, including Bangladesh, Burkina Faso, Chad, Côte d'Ivoire, the Democratic Republic of the Congo (DRC), Ghana, Mali, Mozambique, Nepal, Nigeria, the Philippines, South Sudan, Tanzania, and Zimbabwe. Of the collected forms, six were written in English, six in French, one in Nepali, and one in Bangla.

The objective of the review was to understand how each participating country's HIS captures age-related data in the context of FP and to assess the variability and consistency of age disaggregation practices across different settings. Therefore, the document analysis primarily focused on FP indicators presented within the DHIS2 data forms to determine the structure, scope, and nature of age disaggregation applied to these indicators. Due to variations in the selection of FP indicators across participating countries, D4I decided to focus on the two most used indicators across DHIS2 forms, including “Number of Current FP Users” and “Number of New FP Users.”

KIIs

Following the desk review, D4I conducted KIIs with in-country M&E officers who have experience working with DHIS2 FP data. A total of 11 informants from 10 countries were interviewed to gain insights into the

practical aspects of FP data collection and use, age disaggregation, and the challenges faced in the process. The interviewed officers were from Bangladesh, Burkina Faso, Côte d'Ivoire, the DRC, Ghana, Mali, Nepal, Nigeria, the Philippines, and Zimbabwe. The selection of informants aimed to cover a diverse range of experiences and perspectives on managing and analyzing FP data within the DHIS2 system, as well as align with the DHIS2 data forms that D4I was able to access.

Almost all interviews with M&E officers were conducted virtually via Zoom. Due to schedule constraints, D4I was unable to directly discuss the interview questions with the informant from the Philippines; however, the M&E officer provided responses in written format. Communication during interviews was facilitated in either English, French, or Bangla to ensure effective interaction with all participants. Specifically, a Track20 staff member provided French interpretation for three KIIs, while Google Translate was used for one KII. Two KIIs conducted in Bangla were facilitated, transcribed, and translated into English by two local D4I staff members. To systematically capture the information gathered, each interview was audio recorded and then summarized using a reporting template developed by D4I.

Prior to the interview phase, D4I used the collected DHIS2 forms to draft a data flow diagram for each country to illustrate the flow and structure of FP data. During the interview process, it became apparent that several DHIS2 data collection forms either did not fully capture the actual data flow, were outdated, or did not reflect current practices. With inputs from key informants, D4I was able to revise the data flow diagrams and validate the updated information through follow-up email communications. However, D4I was unable to conduct interviews with M&E officers from Chad, Mozambique, South Sudan, and Tanzania, who might have provided clarifications or revisions on the reviewed data collection forms. Therefore, the team decided to exclude these four countries from the study.

Data Analysis

D4I used a matrix framework to structure the qualitative data, where each respondent's feedback was recorded in a separate row and each interview topic was organized in a column. The organizational approach aimed to facilitate analysis across respondents as well as the sorting and comparison of data by thematic areas.

The analysis of both the DHIS2 data collection forms and the KIIs followed a thematic approach, which aimed to identify common practices and challenges in age disaggregation of FP data. The synthesized findings from the desk review of the data forms informed the interview guide, while the interviews helped contextualize, validate, and explain the review findings. This process aimed to ensure a broad understanding of age disaggregation practices and their implications for FP programming and policy making.

Findings

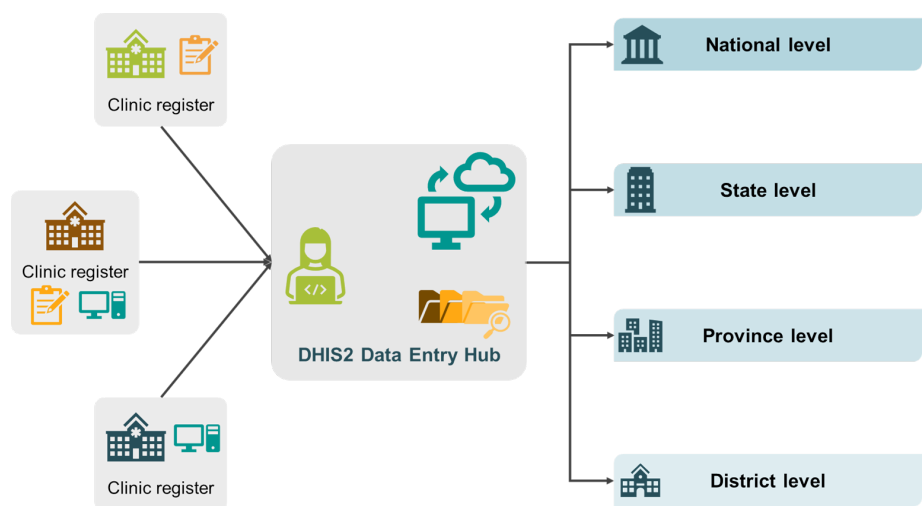
DHIS2 FP Data: Collection, Quality Assurance, and Use

Data Collection Process

Interviews with in-country M&E officers revealed a complex picture of the FP data collection for DHIS2 as these countries implement both shared and distinct approaches for the process. FP data for DHIS2 are generally collected through registers at health facilities. The collected information includes details on client information, FP methods provided, and provision of FP counseling or information. The data recorded in registers are aggregated daily and summarized monthly by health facility staff.

The summary captures key FP indicators, such as the number of FP services provided, types of FP methods used, and demographic information of clients served. The monthly summaries are then transferred to higher levels of the health system hierarchy, such as subdistrict, district, or regional health offices, either in paper or electronic form. At the district or regional level, the aggregated data are entered into the DHIS2 platform either manually from paper summaries or direct electronic transfer from digital tools. Before the final submission, or after data entry into DHIS2, there may be a process of verification and correction to ensure data accuracy. Once entered into DHIS2, the data are available for analysis at multiple administrative levels, from subdistrict and district to subnational and national levels. Figure 2

Figure 2. A typical FP data collection process for DHIS2



depicts a typical FP data collection process for DHIS2.

Commonly, countries employ a hybrid data collection system that involves initial paper-based data recording at the facility level, and then the data are transferred by electronic data entry into the DHIS2 platform. This system indicates a transitional phase from traditional to digital data management methods across multiple countries. Additionally, monthly data aggregation and reporting emerged as a common practice, where the FP data are summarized and then reported to higher administrative levels or directly entered into DHIS2. This monthly data entry cycle was emphasized to “facilitate regular updates and analysis” of FP data and consequently “support timely monitoring and decision making.” Furthermore, FP data access was observed to occur at different levels, from health facilities to subdistrict, district, province, and national levels. The decentralization was reported to enable the accessibility of data from various

levels of the health system, which supports the monitoring of FP service delivery.

Despite the commonalities, variations in the implementation of data collection and data management were noted. One significant difference was the degree of digital integration and direct data entry into the DHIS2 system. For example, Burkina Faso, Ghana, and Nepal are advancing with digital solutions and tools, such as mobile phone/tablet apps and web-based registers, while some other countries, including Bangladesh, Côte d'Ivoire, the DRC, and Nigeria, continue to rely heavily on paper-based records for initial data collection.

Key informants also suggested differences in the level of detail in the data entered into DHIS2, particularly regarding age disaggregation. For instance, the DRC and Zimbabwe are working toward incorporating more detailed age disaggregation, whereas others have not mentioned such initiatives.

Quality Assurance

Interviewed M&E officers highlighted the importance of data quality assurance and indicated that countries have implemented various mechanisms to ensure the accuracy and reliability of FP data collected for DHIS2.

“The Directorate of Sectoral Statistics (DSS) has established validation rules for data entry. The DSS also carries out supervisions to control data quality. We support them in routine data quality assessments relating to reproductive health data.” – Burkina Faso KII

“They focused on the lowest level, from the health facilities, and tried to figure out where the errors were being made. They also do the same at the district level. Each month, the district has a monthly meeting to review the quality of their data.” – DRC KII

“At the national level, we look at the data quarterly because that's the validation system that we have. But the district level is supposed to look at the data monthly.” – Ghana KII

“We managed to develop this dashboard [known as FPDDataPro]. So, what I do every month is I go into the dashboard. Dashboard is a data quality module with about seven metrics that you use to check for data quality.” – Zimbabwe KII

Despite differences in specific strategies, a common theme across the studied countries was the implementation of a multi-level data validation process. The process involves cross-checking data entered into the DHIS2 platform with paper-based records, applying validation rules within DHIS2 to identify discrepancies, and conducting routine assessment or supervision visits at facility, district, and national levels. The multi-level validations reportedly involve different stakeholders from low- to high-levels performing their quality checks to ensure the integrity of the data, including health facility managers, M&E officers at DHIS2 data entry hubs at the district level, and national health program officers. For example, Bangladesh, Burkina Faso, Ghana, Mali, Nepal, and Zimbabwe conducted routine quality checks within facilities and supervision visits to facilities for direct data quality assessments. Côte d'Ivoire, the DRC, Ghana, and Mali reportedly adopted monthly data reviews and validations at the health facility and district levels through meetings and working sessions. Several countries, such as Burkina Faso, Ghana, and Mali, have reportedly conducted routine data quality assessment visits periodically (e.g., every six months, quarterly, or twice a year) to systematically evaluate and improve the quality of

collected data.

In addition, the use of technology was cited as central to these data quality assurance efforts across the countries. This included the use of validation rules, dashboards for monitoring data quality metrics, and notifications for data entry issues. Côte d'Ivoire and Mali established protocols for data verification and modification at various administrative levels before publication. The integration of DHIS2 with other technological tools (e.g., web portals, electronic Management Information System [e-MIS], and dashboards) has enabled Bangladesh, Nigeria, and Zimbabwe to identify discrepancies and facilitate timely corrections.

However, discussions with M&E officers indicated that the strategies and challenges of data quality assurance vary by country due to differences in health system infrastructure, resource availability, and the priority given to FP programs. For instance, Bangladesh focuses on physical assessments and manual cross-checks against register books, while Burkina Faso uses a combination of validation rules, paper register checks, and routine data quality assessment visits. Zimbabwe employs an FP dashboard, known as FPDDataPro¹, embedded in DHIS2 with specific metrics for data quality monitoring while maintaining routine check-ins with district-level staff for data quality checks and addressing discrepancies. Furthermore, the frequency and type of data quality monitoring activities (e.g., field visits, supervision missions, and data validation meetings) reportedly differ among countries. For example, Ghana conducts field visits for data quality assessments two to four times a year, while Mali performs routine data quality assessments every six months. In line with this, the level and form of stakeholder engagement in data quality monitoring differ. The engagement ranges from direct involvement of health facility staff and district health officers to national-level coordination and feedback mechanisms. For example, the DRC has used WhatsApp for communication with district chiefs.

Key informants also acknowledged various challenges in data quality assurance across countries, including issues related to technology and resource allocation. In Bangladesh, issues like hardware malfunctions and inadequate training affected data entry, while in Côte d'Ivoire, errors primarily occurred at the facility and district levels due to inattention or incorrect data entry. Zimbabwe highlighted concerns about the increased workload and potential for errors due to the introduction of new age-disaggregated data collection forms. The studied countries have reportedly tailored solutions to these challenges to their context, such as additional technical support, capacity building, the development of specific mechanisms for data quality checks, and conducting pilots with additional age disaggregation.

Data Use

Thematic analysis of KIs suggested diverse practices in the use of DHIS2 FP data across the examined countries. The primary applications of DHIS2 FP data are for monitoring and evaluation, decision making, and planning purposes. Across countries like Bangladesh, Burkina Faso, Côte d'Ivoire, the DRC, Ghana, Nepal, Nigeria, and the Philippines, DHIS2 FP data have played a central role in monitoring program

¹ FPDDataPro is available in the DHIS2 Play Store as an app that any country with DHIS2 capabilities can download. In addition to Zimbabwe, Uganda and Nepal are also in the process of installing the app as well. Meanwhile, DRC has an older version of the app.

performance, with an emphasis on evaluating service delivery, tracking progress against national FP goals, and informing planning activities.

Burkina Faso uses the data for monitoring objectives and quantifying FP products, while Ghana employs the data for commodity forecasting and tracking new FP users. Similarly, in Côte d'Ivoire and the DRC, the primary use of the data is for monitoring FP goals at all levels (e.g., uptake of FP services among adolescents and youth) and informing the development of costed implementation plans (CIPs) or tracking the achievement of FP goals, while Nepal and the Philippines mainly utilize the data for planning and budgeting at various government levels, particularly for procurement processes.

KIIs also indicated that FP data have been used as a medium to engage stakeholders in meetings, forums, and workshops and through reports and briefs shared with stakeholders and decision makers, including government officials, nongovernmental organizations (NGOs), and donors. The engagement reportedly occurred at different levels, from local to national. The FP Forum in Zimbabwe, which occurs quarterly, is an example of a platform where DHIS2 FP data are used to review program performance and make strategic decisions. Similarly, Nepal's bimonthly FP subcommittee meetings, where routine FP data analysis results are presented, were highlighted as an important approach to facilitate dialogue among government agencies, NGOs, donors, and private sectors in managing FP initiatives.

"Broadly, there are two main uses. We've used DHIS2 data for monitoring the national FP goals and strategy and to determine indicators and progress for CIP." – Côte d'Ivoire KII

"The data help them check their progress versus their national goals... They prepare sort of electronic reporting normally in the form of PowerPoint." – DRC KII

"FP data are primarily used for... technical decision-making, such as change of activities." – Mali KII

"All we do is to create some dashboards and put this information on it so that they are able to use it for decision making." – Nigeria KII

"FP data are primarily used for public utilization, budget proposals, forecasting (procurement)." – Philippines KII

"However, there are two divisions and two agencies here... Because of this, I'm unable to determine the precise number of deliveries until I receive the data from the DGFP." – Bangladesh KII

Generally, FP data are analyzed and presented to decision makers and stakeholders through a variety of formats, such as tables, graphs, PowerPoint presentations, and narrative reports, to facilitate easy interpretation and discussion of data trends as well as informed decision making. For example, the DRC, Mali, Nepal, and Zimbabwe used PowerPoint presentations to support data-driven dialogues and planning at annual reviews, consensus workshops, and stakeholder meetings, while Burkina Faso, Côte d'Ivoire, Ghana, and the Philippines presented the FP data analysis results in formats like narrative reports or routine indicator worksheets to stakeholders.

However, the use of DHIS2 FP data was not without challenges. For example, Bangladesh indicated challenges related to comprehensive use and sharing of FP data, which stemmed from the existence of a diverged health information management system (e.g., the Directorate General of Family Planning [DGFP] vs. the

Directorate General of Health Services [DGHS]).

DHIS2 FP Data: Age Disaggregation

Age Disaggregation Settings Across Countries

Results from the review of DHIS2 FP data collection forms and KIIs with M&E officers presented a diverse picture of the age disaggregation practices for DHIS2 FP data across the examined countries, in which the settings of age categories ranged from comprehensive to simplified segments. See the Appendix for DHIS2 data flow maps from countries included in the assessment.

The data form review and KII findings highlighted a shared acknowledgement of the importance of age-disaggregated data for monitoring and planning FP programs and policies. Apart from Bangladesh, the studied countries have integrated a certain extent of age disaggregation into their DHIS2 FP data. The age disaggregation practice among these countries fell into one of three categories: extensive, with six to nine age groups; moderate, with three to four age groups; or minimal, with two age groups. Specifically, Nigeria's disaggregation that comprises nine distinct age groups (ranging from 10–14 to ≥50 years) emerged as the most comprehensive among the examined countries, while Ghana follows with a system including six age groups (spanning from 10–14 to ≥35). Côte d'Ivoire, Burkina Faso, and Zimbabwe employ a moderately detailed breakdown, featuring three to four age groups (from <15 to ≥25). In contrast, DRC, Mali, Nepal, and the Philippines have adopted a simplified, two-category system with various specifications (from <20 to ≥20 for DRC and Nepal, ≤24 to ≥25 for Mali, and from 15–19 to 20–49 for the Philippines). Figure 3 exhibits details of age-disaggregation patterns by FP indicator and by country.

Figure 3. Age disaggregation of DHIS2 FP data by indicator, by country

Country	New FP Users									Current FP Users								
	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	≥50	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	≥50
Nigeria										10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	≥50
Ghana	10-14	15-19	20-24	25-29	30-34				≥35	10-14	15-19	20-24	25-29	30-34				≥35
Zimbabwe	<16	16-24							≥25	<16	16-24							≥25
Burkina Faso		≤19	20-24						≥25									
Cote d'Ivoire	<15	15-19	20-24						≥25									
Mali		≤24							≥25	≤24								≥25
Nepal	<20								≥20	<20								≥20
DRC	<20								≥20									
Philippines		15-19							20-49		15-19							20-49
Bangladesh																		

Furthermore, significant differences were observed in the specification and application of age disaggregation practices among the countries under review. Notably, there were discrepancies in how age

breakdowns were applied to specific or all FP indicators across the countries. Bangladesh, for example, does not incorporate age segmentation for any of its DHIS2 FP data indicators. In contrast, other studied countries adopt a mix of disaggregated and non-disaggregated FP indicators. The selective application of age disaggregation to certain FP indicators rather than completely across all indicators was reported to be influenced by the priorities of FP programs and the capacity of the system to manage data collection efficiently. Countries like Ghana, Mali, Nepal, the Philippines, and Zimbabwe implement age segmentation for both “New FP Users” and “Current FP Users” indicators, whereas Burkina Faso, Côte d’Ivoire, the DRC, and Nigeria incorporate age breakdown practices for only one of these key indicators. Overall, a higher number of countries were observed to implement age disaggregation for the “New FP Users” indicator compared to the “Current FP Users” or “Returning FP Users” indicator. Out of 10 studied countries, eight apply age segmentation to the former indicator, while only six do so for the later indicator.

Despite differences in the age group selection and application, there was a consistent focus on adolescents and young people in the age disaggregation practices across the countries. This emphasis was evident through the inclusion of specific age categories that target this demographic, which is generally defined as individuals under 25 years old. Apart from Bangladesh, all studied countries implement age groups under 25 years old for their DHIS2 FP data. Furthermore, some countries have also tailored their data disaggregation to focus on specific subgroups within the adolescent and youth population. For instance, Côte d’Ivoire, Ghana, Nigeria, and Zimbabwe have adopted detailed categories that comprise both early and late adolescence and youth (e.g., 10–14 or ≤ 15 or ≤ 16 , 15–19, 20–24), whereas the Philippines and Zimbabwe have narrowed the specific age ranges for this population group used for disaggregation (e.g., 15–25 and 15–19, respectively). In contrast, the DRC, Nepal, and Mali have combined both adolescent and youth populations together by simplifying the age segmentations into <20 and ≥ 20 and ≤ 24 and ≥ 25 years old, respectively.

KII Results on Age Disaggregation Approaches

Interviews with key informants revealed several influential factors guiding the application and selection of age disaggregation approaches across the studied countries. These factors primarily stem from each country’s social norms, public health contexts and priorities (including target demographics of FP programs), legal frameworks, methodological considerations, resource and data collection capacity, and setups of data management systems.

Bangladesh, uniquely, does not implement age disaggregation for FP data within the DHIS2 system but relies on other reporting systems for detailed demographic data, such as e-MIS and the Logistics Management Information System (LMIS).² In Nepal, age segmentation for FP data is shaped by the legal age of marriage, which has resulted in age categories based on marital status and legal considerations. Specifically, the country focuses on <20 and ≥ 20 categories to differentiate between unmarried and

² Bangladesh’s e-MIS is an electronic platform designed to enhance public health service delivery by capturing extensive data, including patient information, service delivery metrics, supply chain details, human resources, and financial management. The system supports age-disaggregated data, essentially for tailoring health services and policies in areas such as maternal and child health, disease surveillance, and nutrition programs.

“[These age categories are] to meet the needs of the program to highlight adolescents and young people in the “FP Users” data. There are many unwanted pregnancies among adolescents/young people. And in recent years, the emphasis has been placed on offering methods to this group.” – Burkina Faso KII

“...we decided to select those age groups because we have a lot of country specific interventions that target adolescents. We have a very strong adolescent health and development program, and our policy allows adolescents to access family planning... So, we try to keep track of what is happening among these age groups.” – Ghana KII

married women. In Mali, the Philippines, and Zimbabwe, the rationale for age disaggregation is directly linked to maternal health objectives, as age categories are determined by the vulnerability and maternal mortality risks associated with specific age groups (e.g., adolescents, young adults, and women of reproductive age).

A shared guiding factor across several countries was the strategic focus on adolescents and young adults in FP data collection. This emphasis stemmed from the recognition of high rates of unintended pregnancies among these age groups, which have prompted the in-country health authorities to tailor their FP programs and interventions accordingly. Specifically, Côte d'Ivoire, Ghana, and Nigeria have adopted detailed age categories for their DHIS2 FP data to support their adolescent health and development programs, particularly their policies promoting accessible reproductive health services for adolescents.

Additionally, the DRC and Nepal have implemented youth-only age disaggregation (<20 and ≥20) to align its FP data collection with national priorities on adolescent and youth health. This combined age group for adolescents and youth below 20 is

intended to address issues related to low and inaccurately reported numbers for the younger ages. Meanwhile, Burkina Faso and Zimbabwe have structured their age categories to ≤19, 20-24, ≥25, and <16, 16-24, ≥25, respectively. This structure likewise aimed to emphasize youth while specifically addressing the challenges of low reported numbers of adolescents.

Furthermore, methodological considerations have significantly influenced the selection and application of age disaggregation settings. Several countries have reportedly adjusted their data collection strategies to balance the details of the data with the realities of data collection and management within their health systems. Countries like Burkina Faso and the DRC have simplified and reduced the number of age disaggregation categories to reduce complexities and inefficiencies in data collection as well as to enhance the accuracy of data reporting while still ensuring sufficient coverage of the target demographic. Similarly, the decision in Côte d'Ivoire to only collect age-disaggregated FP data for the “New FP Users” indicator stemmed from concerns about the burdensome workload for health facility staff, as proven by results from a pilot to apply age breakdown for all indicators. For the same indicator, Nepal excluded age disaggregation for new male FP users due to specific contraceptive methods being predominantly female-focused (e.g., injectables, implants, and IUDs).

Discussions with M&E officers also highlighted that several countries were in different stages of revising and enhancing their age disaggregation practices to meet their FP programmatic needs and policy objectives more effectively. Nigeria completed its update of the 2013 DHIS2 data collection form and successfully launched a revised form in 2019 that adopted an extensive age disaggregation for the “Current FP Users” indicator. Bangladesh was in the process of integrating its vertical data management systems, including subdistrict-level FP service statistics, e-MIS and LMIS, into one national Management Information System (MIS) for FP, with the aim of creating a dedicated FP DHIS2 system. Meanwhile, the DRC has recently revised and updated its DHIS2 data collection form to include more detailed age disaggregation (10–14, 15–19, 20–24, and ≥25), which is currently undergoing testing. Similarly, Zimbabwe completed a pilot and is now in the process of rolling out its revised DHIS2 data collection form, which will introduce additional breakdowns for the group of ≥25 years (25–49 and ≥50). The revision was driven by the need to capture data on contraceptive use among older populations and to address legal considerations related to the age of consent in the country. The overarching goal of this process was to solve limitations in current disaggregation practices and gain more understanding of FP needs across different age groups. Furthermore, Ghana and Côte d’Ivoire indicated periodic review cycles of DHIS2 data forms as part of their strategy to continuously improve the collection methodologies of routine FP data. These cycles aimed to facilitate adjustments based on programmatic needs and policy objectives to ensure that the data collection framework remains aligned with the FP landscape within each country.

“We decided to disaggregate the age groups to be below 14, then 15 to 19, then 20 to 24, 25 to 49, and 50 and above. So, we’re trying to capture all the adolescents as well as the women of reproductive age from 25 to 49.”
– Zimbabwe KII

“The reason why we only apply age disaggregation on ‘New Users’ data was about the workload. We did some pilots of age disaggregation for all FP indicators, and it was too much work for the providers. But on the next revision of the tools, we’re going to experiment with doing age disaggregation for ‘New FP Users’ and ‘Returning FP Users.’ So, we are on a cycle of five year revision. The last one was two years ago. And it’s an established cycle where we take notes, we test the forms, and we check for changes in methodology.” – Cote d’Ivoire KII

Calculating the Distribution of FP Methods by Age Group

Analysis of KIIs with M&E officers revealed that the structure of the DHIS2 systems across countries varied in their ability to allow for the calculation of the distribution of FP methods by age group. Specifically, the variations were due to the structure, configuration, and functionality of the DHIS2 systems as they currently stand and did not necessarily reflect the overall capacity of the national M&E systems or their staff to perform these calculations. Table 1 summarizes the current state of each country’s functionality as determined by their existing DHIS2 configurations for calculating the distribution of FP methods by age group using DHIS2 FP data.

Among the countries under review, Burkina Faso, Côte d'Ivoire, Ghana, and the Philippines showed the capacity to calculate FP method use across specific age groups using routine DHIS2 data. Ghana and the Philippines can calculate and monitor the FP distribution by age group for both new and current FP users, while Burkina Faso and Côte d'Ivoire can make the calculations for the “New FP Users” indicator only.

Zimbabwe is capable of disaggregating data by age for FP visits; however, it does not apply the same segmentation to FP method distribution.

Despite the application of age breakdowns in certain elements of their DHIS2 FP data, M&E officers from the DRC, Mali, and Nepal expressed limitations in their ability to disaggregate FP method distribution by age. Similarly, in Bangladesh, the system currently does not support the calculation of the distribution of FP methods by age group due to the exclusion of age disaggregation for the DHIS2 FP data.

D4I was not able to confirm the status with Nigeria as the key informant was not sure whether Nigeria’s DHIS2 FP data structure was capable of the calculation.

Potential Limitations of Current Age Disaggregation Approaches

Interviews with M&E officers indicated that the existing age disaggregation approaches within the DHIS2 system may pose challenges for FP data analysis, regardless of whether the country has an extensive, moderate, or minimal number of age groups. These M&E officers discussed concerns about the ability of current age disaggregation to generate meaningful insights, design interventions for specific age groups, and support informed decision making for FP programs.

Limitations to analysis: The current age disaggregation practices within the DHIS2 FP data can limit what can be analyzed. For example, the aggregation of age data into broad categories (e.g., <19), as observed in Burkina Faso, has blurred the distinction between younger adolescents (10–14) and older adolescents (15–19). While these data have sometimes been requested by the Department of Adolescent Health, the

Table 1. Summary of functionality levels within existing DHIS2 across countries for calculating the distribution of FP methods by age group

Country	Can distribution of FP methods be calculated by age group?
Bangladesh	No
Burkina Faso	Yes
Côte d'Ivoire	Yes (“New Users” only)
DRC	No
Ghana	Yes
Mali	No
Nepal	No
Nigeria	Unable to confirm
Philippines	Yes
Zimbabwe	No

“We struggle with the fact that we only have ‘New Users’ listed. All we know currently is the women coming in for the first time. So, this isn’t counting the women coming back, they took a break, or they are switching methods or whatever. This is specifically important for young people because they are such a priority for us.” – DRC KII

“The disaggregation by age for the e-LMIS is not done, which makes it impossible to distinguish consumption or distribution of products by age groups.” – Mali KII

absence of the data was not seen as much of an issue, especially as supplementary observation data could sometimes be collected.

The inability to disaggregate data for specific age groups can restrict the ability to perform detailed analyses required for guiding actions and making informed decisions for effective FP programming. This challenge was observed in Mali, where the absence of age disaggregation in its e-LMIS system has prevented a clear understanding of FP product consumption or distribution across different age groups. Consequently, these limitations have critically impacted trend analysis and the effective monitoring of the establishment and implementation of strategic directions for FP programs across various age groups.

Sometimes age data quality was also presented as a limitation to analysis. KIs from Ghana and Zimbabwe noted challenges in accurately capturing FP data for individuals below 14 years old. In these countries, service providers reportedly encountered difficulties in verifying the ages of clients within this age group. M&E officers also reported that young FP clients may provide false ages to access FP services without parental consent, which further complicates data reliability.

Limitations to generating meaningful insights: The structure and focus of age data can significantly impact the ability to generate meaningful insights from FP data.

In Bangladesh, the absence of age-disaggregated FP data was noted as a key barrier to understanding the preferences for contraceptive methods among different age groups. The limitation has impeded efforts to ensure the stable availability and continuous supply of preferred contraceptive methods, consequently affecting the provision of FP services and logistics management of FP commodities.

In Nepal, although age segmentation has been applied for all FP indicators, the M&E officer highlighted the challenge in calculating specific indicators for adolescents due to broad age categorizations (<20 and ≥20). Similarly, in Zimbabwe, a key limitation identified is the current grouping of both adolescents and youth together in the same age bracket of 16–24, which features both minor and adult groups. This presents challenges because legal restrictions may hinder access to contraceptives for those under 18. Furthermore, the age of consent for sexual activity being 18 further complicates this grouping, as individuals aged between 18 and 24 can have easier access to FP services compared to those aged 16 to 17.

Limitations of the system: Although not all challenges were solely associated with age disaggregation, M&E officers noted that different system structures and age disaggregation approaches can impose significant technical, operational, and data management challenges. In Nepal (with only two age categories), technical challenges such as the lack of dynamic data visualization and integration between DHIS2 and other

“If we don’t have age disaggregation, we would face challenges in knowing which method is more accepting in each age and readying the availability of the methods for services... So, for the prevention service discontinuity age disaggregation is a must. Otherwise running FP service smoothly would be a bit difficult.” – Bangladesh KI

“There are limits because the 10–14 and 15–19 years old are submerged in the under-19 age group. It does not allow a much finer analysis to be made for the group of adolescents and young people and to be able to better guide actions.” – Burkina Faso KI

systems pose significant barriers to effective data analysis. M&E officers from Bangladesh, Côte d'Ivoire, Nepal, the Philippines, and Zimbabwe highlighted that technical and operational challenges, such as system integration issues, unstable internet connection, hardware malfunctions, additional workload on health facility staff, and data reporting quality, have complicated the efficient collection, use, and management of FP data within the DHIS2 system. For instance, in Côte d'Ivoire, “weak and unstable internet” connections, together with a formal data request process, were cited as significant barriers to accessing DHIS2 data across all levels. Nepal’s M&E officer pointed out the challenges in integrating data from various sources, including private pharmacies, which have been significant distributors of contraceptives to adolescents but often do not report to DHIS2. In the Philippines, while the current age disaggregation provides benefits in identifying gaps and underused FP methods among adolescents, challenges in ensuring data quality and reporting were also emphasized. In Zimbabwe, the M&E officer expressed concern about the anticipated increase in workload and the potential for errors associated with the upcoming introduction of the revised, more detailed age-disaggregated data collection form.

Additional Limitations of FP Data Structures

In Burkina Faso, Côte d'Ivoire, and the DRC, although age disaggregation was adopted for the “New FP Users” indicator, its application remains limited for the “Current FP Users” or “Returning FP Users” indicators. DHIS2 FP data users have emphasized that this limitation has constrained the ability to track the current or returning users within the same age brackets, therefore limiting the insights into FP method preferences and service uptake among these user groups, particularly in understanding adolescent and youth behaviors and preferences (as mentioned in the DRC).

Furthermore, challenges related to sex-disaggregated FP data for adolescents and youth were also reported, with notable concerns around gender disparities in data collection and analysis. For example, in Bangladesh, the emphasis on female adolescents over males in data collection was suggested as a key factor that has hampered insights on the FP needs of male adolescents and youth and ultimately impacted comprehensive service delivery and intervention strategies.

Finally, age alone was found to be an insufficient proxy for marital status. Ghana addressed this by incorporating a “Marital Status” indicator into their data collection to better understand the FP needs of married versus unmarried adolescents and to tailor interventions more effectively. The adaptation highlights the importance of data assumptions and indicates potential insufficiencies in capturing only age as a demographic variable.

What have M&E officers recommended?

D4I sought recommendations from M&E officers for improving DHIS2 FP data collection protocols, with a particular focus on age disaggregation. While acknowledging the need to balance data collection efforts with the capacity of health facility staff, the key informants suggested the addition or revision of specific details they believed necessary for the effective development and implementation of FP programs and policies. The following are key takeaways from these recommendations:

- ***Need for more specific age disaggregation:*** Several M&E officers proposed the inclusion of more specific age categories to better capture data relevant to different demographic groups.
 - Key informants from Bangladesh, Côte d’Ivoire, Mali, and Nepal emphasized the necessity for additional age breakdowns to facilitate monitoring FP interventions and programs aimed at adolescents and youth. In alignment with this, the informant from Bangladesh advocated for adherence to the five-year World Health Organization (WHO) age categories for demographic analysis, starting with age categories from legal marriage ages (i.e., 18 for girls and 21 for boys), while the informant from Mali suggested to start age segmentation from 10 years old instead of the current 15 years old (15–24 and ≥25). Similarly, the informant from Zimbabwe highlighted the need for further disaggregation within the age group of 15–19 to address differing needs due to varying legal age restrictions regarding data collection and FP service provision within this group.
 - The key informant from Ghana suggested further disaggregation by subdividing the age category of ≥35 into smaller age brackets, such as 35–49 and ≥50, as the informant believed that the current age categorization lumps together a diverse group of individuals aged 35 and above. Breaking down this category would provide more detailed data and allow for better understanding of FP use among different age groups, including peri-menopausal women. The insight would support the development and implementation of targeted interventions and policies.
 - The key informant from the Philippines did not propose adding age breakdowns to the DHIS2 FP data; however, they advocated for a revision and adjustment of the existing age brackets. The suggestion involves disaggregating age groups into ≤20 and 21–49 instead of the existing 15–19 and 20–49 categories.
- ***Improvement in data elements and system features:***
 - *Data elements:* Specific recommendations regarding the enhancement or addition of data elements and system features varied by country. M&E officers from Côte d’Ivoire, the Philippines, and Zimbabwe advocated for the inclusion of “postpartum FP” and “gender” information to the data form. The informant from Ghana proposed enhancing the DHIS2 FP framework with data elements focusing on “discontinuation” and “removal of FP methods,” while the informant from the DRC suggested expanding the application of age disaggregation to additional FP indicators, particularly those targeting adolescents and youth groups. Similarly, the M&E officer from Côte d’Ivoire is considering a pilot of age segmentation for all existing FP indicators in the next round of their DHIS2 data form revision. The informant from Nigeria emphasized the need to align DHIS2 FP data elements with program priorities and Sustainable Development Goals (SDGs).
 - *System features:* The informant from Nepal highlighted the importance of embedding data visualization features within the DHIS2 platform to facilitate enhanced decision making at all

levels. Moreover, the informant from Ghana emphasized the preference for digitizing records to minimize errors and improve efficiency, indicating a broader interest in leveraging technology for better data management. The informant from Mali recommended considering best practices from Track20 tools for implementation of age disaggregation for DHIS2 FP data.

- ***Integrating FP data with other health services:*** Key informants from Côte d'Ivoire and Zimbabwe recommended integrating FP data with other health services (e.g., postpartum FP, HIV/AIDS, and survival cancer screening) to provide a more complete view of health needs.
- ***Training and support for data entry personnel:*** Key informants from Bangladesh and Ghana highlighted the importance of training for individuals responsible for data entry to ensure accuracy and data safety.

Conclusion

The assessment findings suggest significant variability in current age disaggregation practices for FP data within the DHIS2 systems across multiple countries. This variability reflects differences in priorities of FP programs and policies, data collection capacity, and methodological considerations unique to each country. For example, the extensive age disaggregation implemented in Nigeria and Ghana contrasts with the minimal age segmentation observed in the DRC, Mali, Nepal, and the Philippines, and the findings indicate diverse strategies to meet FP programmatic needs and policy objectives. In addition, the emphasis on age-disaggregated data for adolescents and youth across most countries implies a global recognition of the unique FP needs within this demographic, although the level of detail and approaches to disaggregation vary significantly across the countries.

Interviews with M&E officers revealed that the choice of age disaggregation largely influences the design and implementation of FP programs. Detailed age disaggregation, as seen in Nigeria and Ghana, enables targeted interventions, especially for high-risk groups such as adolescents and youth. On the contrary, the absence of age-specific data in countries like Bangladesh hinders the development of age-specific FP strategies and efficient resource allocation and could lead to missed opportunities to optimize FP service delivery.

Furthermore, the assessment findings highlight the need for ongoing dialogue and learning to improve FP data collection systems. While challenges related to data quality, digital integration, and capacity building at various levels were identified, these should be viewed as opportunities to better understand the current landscape and promote continuous improvement. Instead of proposing specific solutions, this assessment serves as a starting point for countries to engage in further discussion, reflection, and shared learning to address the complexities of high-quality data collection, including age disaggregation.

Next steps should emphasize continued dialogue, learning, and reflection, with a focus on how to best address the identified challenges. By fostering an environment of open discussion and collaboration, countries can work together to explore practical, context-sensitive approaches that align with both global and local priorities, ultimately leading to improved data quality and use in FP programs.

Based on the findings, D4I proposes the following suggestions for consideration for improving age disaggregation practices for DHIS2 FP data:

- ***Adopt balanced, adaptive, and context-driven approaches while aligning with global efforts and local needs to enhance systems:*** Recognizing the diverse landscape of age disaggregation practices, it is crucial to balance global efforts and local needs to achieve effective and attainable data collection practices that allow for tracking and comparing progress over time.

The Global Action for Measurement of Adolescent Health (GAMA) recommends disaggregating data by age using five-year age categories to support the universal collection of data on adolescents and youth.¹¹ However, there is currently a lack of consensus on age disaggregation practices, primarily due to conflicting documentation, varying perceptions of its importance, and the absence of clear guidance on its practical implementation. For example, while current guidance on postpartum and post-abortion FP service delivery suggests disaggregation by <20 years and ≥20 years, this does not align with GAMA recommendations.^{12,13} This highlights the need for clearer direction and guidance on how to implement age disaggregation effectively, ensuring alignment with global best practices while considering local realities.

- ***Develop adaptable data collection systems:*** Detailed age disaggregation can enhance FP data use and inform programmatic decisions. Investments should focus on developing adaptable, user-friendly data collection interfaces and adopting digital solutions that are suitable for the local contexts and capacities. As with all forms of data, this includes implementing validation checks and establishing robust data quality assurance processes to ensure the reliability of age-disaggregated data. Additionally, it is essential to provide targeted training and technical support for data personnel to facilitate accurate data collection and quality management, including age-disaggregated data. These improvements should aim to balance the benefits of detailed data with the system's capacity to effectively manage complexity without assuming that age disaggregation inherently poses a greater risk of data errors compared to other data collection practices.
- ***Explore the development of a roadmap for the global community toward standardized age-disaggregated data:*** In response to global efforts to standardize age data collection, countries are encouraged to work together to develop a strategic, long-term vision for age disaggregation that promotes harmonization, comparability, and use of FP data both within and across countries. This vision should be informed by a flexible roadmap that outlines visionary yet pragmatic steps to align with global standards while recognizing the current variations in age disaggregation practice across countries. The roadmap should not only aim to meet these universal standards but also reflect a practical and attainable understanding of each country's context, policies, and challenges. Countries should strive to implement detailed age disaggregation while considering feasibility within their specific contexts. To make this approach successful, it is essential to establish clear strategies, such as setting age categories that align with global standards and local needs while ensuring that data collection processes are manageable within existing system capacities. Countries should prioritize building the necessary infrastructure, expanding system capacities, providing training for data

personnel, and integrating validation checks to maintain data quality. A thorough evaluation of the necessary trade-offs is essential, but the emphasis should be on fostering growth toward systems that are capable of capturing valuable, age-specific data that can significantly inform and improve FP programs. The focus should be on expanding capabilities rather than limited data collection based on existing system constraints. This assessment should be approached as part of a broader evaluation framework applicable to any significant data changes within the DHIS2 system, including age disaggregation. It should include evaluating current data quality, assessing system capabilities to accommodate more detailed age disaggregation, analyzing associated costs, and determining the feasibility of implementation. Key questions to address during the assessment include:

- What is the quality of the data in the current system?
- What is the capacity of the system to handle additional age categories (i.e., a more complex system) without declines in data quality?
- What are the cost implications of revising the age categories throughout the system?
- How easy or difficult will it be to roll out the proposed changes? Will it require digital system changes and/or production and distribution of paper materials? Will it require any training?

These considerations should be routinely applied whenever data changes are proposed to ensure that the system's capacity, cost-effectiveness, and data quality are maintained across all types of data modifications, including but not limited to age disaggregation.

- **Carefully consider age categories for adolescents:** Furthermore, when considering the addition of age categories specific to adolescents, it is crucial to carefully consider factors that can affect the accuracy of data collection, such as cultural stigmas, legal restrictions, and privacy concerns. However, the presence of these challenges should not discourage countries' efforts to disaggregate data by age or align their age disaggregation practices with global standards. Additionally, countries should consider the adoption of safe data collection practices that address concerns while continuing to improve data detail and use. In certain cases, it may be valuable to explore alternative methods to gather necessary information without compromising data reliability or person-centered care principles. Key considerations for specific age categories for adolescents include:

- Are there any cultural stigmas that may prevent these individuals from providing their real age to service providers? How might addressing these stigmas through research help normalize FP use among adolescents and shift social norms positively?
- Are there any policy or legal prohibitions against FP service provision for individuals in this age group, especially if unmarried? Could revealing age or marital status lead to negative consequences for service providers or clients, such as privacy concerns, denied services, or parental consent requirements? Conversely, could collecting this data help advocate for policy changes that improve access for these groups?
- If cultural stigma and/or legal prohibitions are present, what are the consequences for data

- accuracy or inaccuracy? On the other hand, how could accurate data collection empower governments and partners to better understand and address the needs of adolescents, thereby fostering youth-responsive health systems?
- Can supplementary information be collected to satisfy information needs without risking the accuracy and reliability of data? Could this approach also enhance the understanding of youth health behaviors and service use, thereby contributing to more effective program designs?
 - Could the addition of new age categories potentially compromise the principles of person-centered care? Is there a risk that introducing younger age categories might result in the denial of services or unintentionally require parental consent? How can we ensure that these changes do not compromise the integrity of service provision and respect the rights of adolescents?
- **Promote cross-country learning and collaboration:** The variety in age disaggregation practices across countries suggests significant learning opportunities. The finding indicates the value of comparative analyses and shared learning opportunities, where countries can exchange their best practices, challenges, and innovations for age disaggregation of FP data. By doing so, they can gain insights to improve their data disaggregation frameworks to better serve their specific needs. Platforms like the Track20 project offer valuable opportunities for M&E officers to engage in cross-country learning and collaboration. Along with other international health initiatives, Track20 provides a structured network for data practitioners to share experiences and learn from the successes and challenges that their international colleagues encountered. This type of collaboration not only promotes a global community of practice but also accelerates the adoption of innovative and effective data management strategies across the board, therefore enhancing the global effort to improve FP data quality and use.

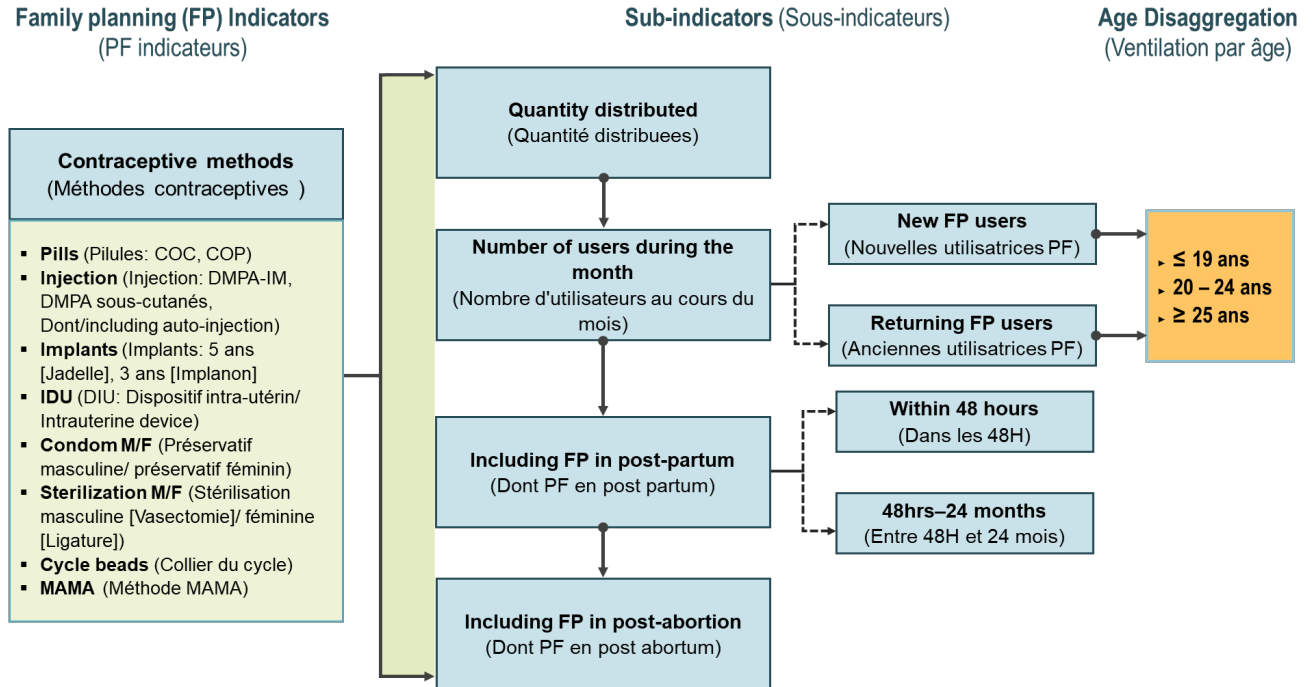
References

1. Bertrand J., Magnani R, & Rutenberg N. (1994). Handbook of Indicators for Family Planning Program Evaluation. The Evaluation Project. Accessed on April 2, 2023 at https://www.measureevaluation.org/resources/publications/ms-94-01/at_download/document
2. da Silva, I. C. M., Everling, F., Hellwig, F. et al. (2020). Does women's age matter in the SDGs era: Coverage of demand for family planning satisfied with modern methods and institutional delivery in 91 low- and middle-income countries. *Reprod Health* 17, 55. <https://doi.org/10.1186/s12978-020-0903-6>
3. Shah I. & Åhman E. (2004). Age Patterns of Unsafe Abortion in Developing Country Regions, *Reproductive Health Matters*, 12:sup24, 9-17, DOI: 10.1016/S0968-8080(04)24002-2
4. Patton G. C., Coffey C., Sawyer S. M., Viner R. M., Haller D. M., Bose K., ... & Mathers C. D. (2009). Global patterns of mortality in young people: a systematic analysis of population health data. *The Lancet*, Vol. 374, Iss. 9693, pg. 881-892, ISSN 0140-6736, [https://doi.org/10.1016/S0140-6736\(09\)60741-8](https://doi.org/10.1016/S0140-6736(09)60741-8).
5. Magadi M. A., Agwanda A. O., & Obare F. O. (2007). A comparative analysis of the use of maternal health services between teenagers and older mothers in sub-Saharan Africa: Evidence from Demographic and Health Surveys (DHS). *Social Science & Medicine*, Vol.64, Iss.6, pg. 1311-1325. ISSN 0277-9536, <https://doi.org/10.1016/j.socscimed.2006.11.004>.
6. Dehne, K. L., & Riedner, G. (2001). Sexually transmitted infections among adolescents: The need for adequate health services. *Reproductive Health Matters*, 9(17), 170-183.
7. Diaz, T., Strong, K. L., Cao, B., Guthold, R., Moran, A. C., Moller, A. B., ... & Banerjee, A. (2021). A call for standardised age-disaggregated health data. *The Lancet Healthy Longevity*, 2(7), e436-e443.
8. Iskarpatyoti, B. S., & Cannon, A. (2017). Barriers to and facilitators of sex- and age-disaggregated data: Zambia (Chapel Hill, NC: MEASURE Evaluation, 2017).
9. Cannon, A., & Iskarpatyoti, B. S. (2017). Barriers to and facilitators of sex- and age-disaggregated data: Kenya (Chapel Hill, NC: MEASURE Evaluation, 2017).
10. Fact sheet: Age-disaggregated data improves family planning policy and programming. (2020). Marie Stope Zambia. Accessed on April 2, 2023 at <https://www.prb.org/wp-content/uploads/2020/05/eeda-zambia-fact-sheet.pdf>
11. Global Accelerated Action for the Health of Adolescents (AA-HA!): guidance to support country implementation, second edition. (2023). Geneva: WHO. Licence: CC BY-NC-SA 3.0 IGO. Accessed on May 9, 2024 at <https://iris.who.int/bitstream/handle/10665/373300/9789240081765-eng.pdf?sequence=1>
12. High Impact Practices in Family Planning (HIPs). (2022). Immediate postpartum family planning: a key component of childbirth care. Washington, DC: HIP Partnership; Accessed on May 17, 2024. Available from: <https://www.fphighimpactpractices.org/briefs/immediate-postpartum-family-planning/>
13. MEASURE Evaluation FP/RH Indicator Database. Available from: <https://www.data4impactproject.org/resources/family-planning-and-reproductive-health-indicators-database/>

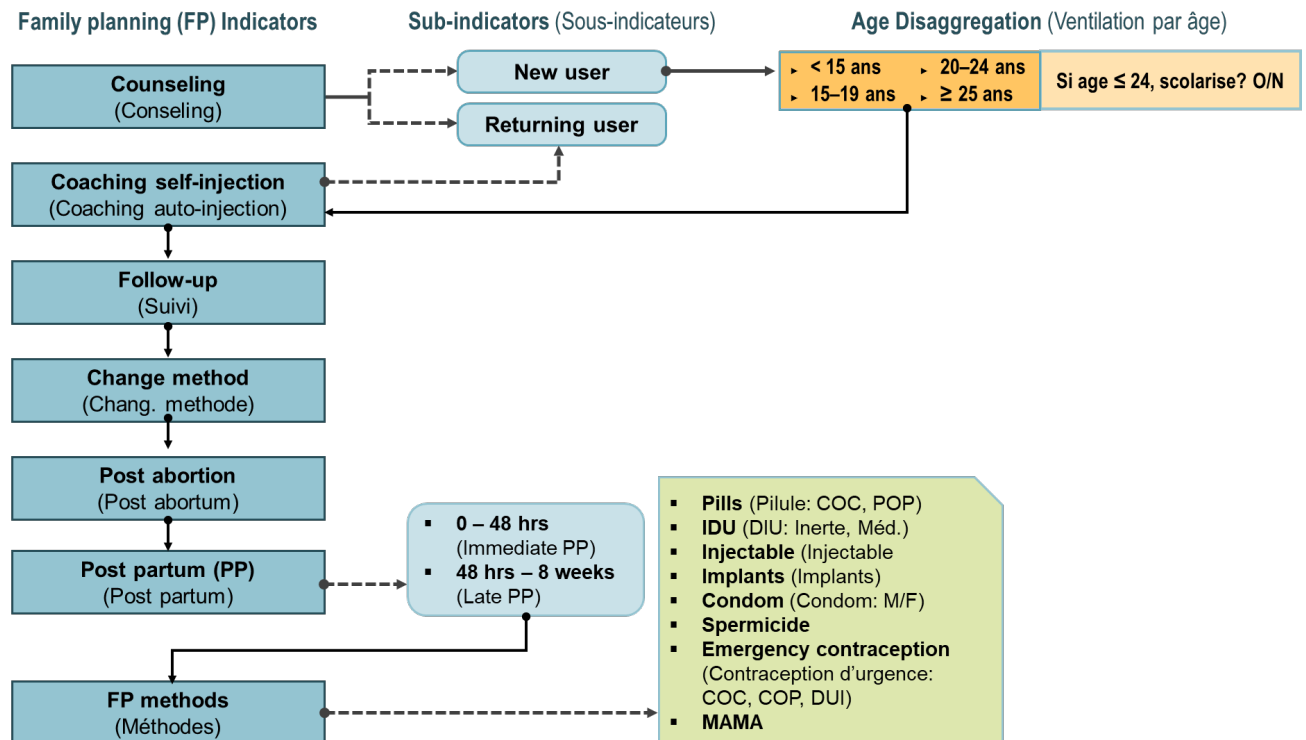
Appendix

DHIS2 data flow maps from countries included in the assessment:

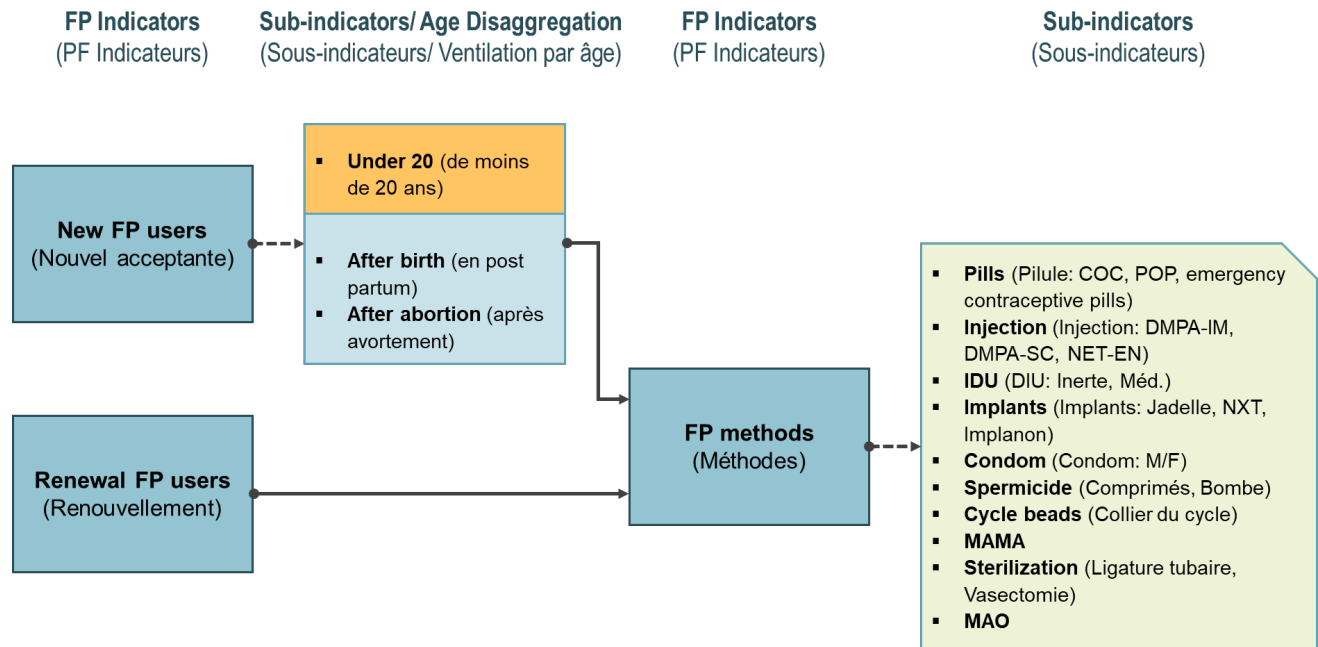
Burkina Faso



Côte d'Ivoire



DRC

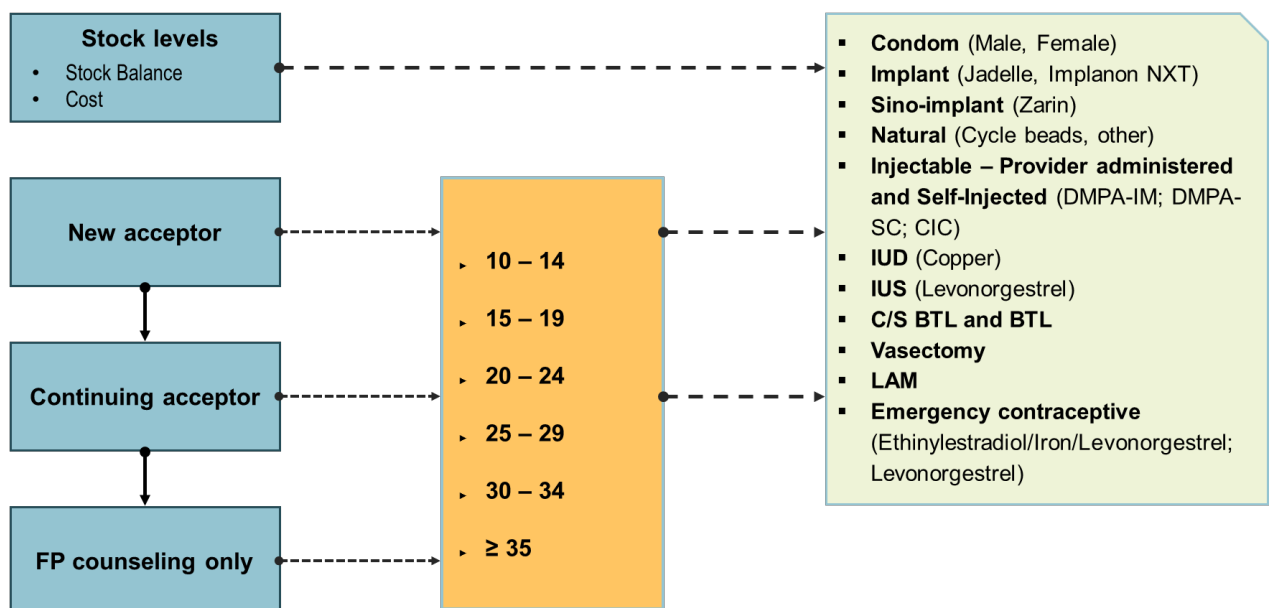


Ghana

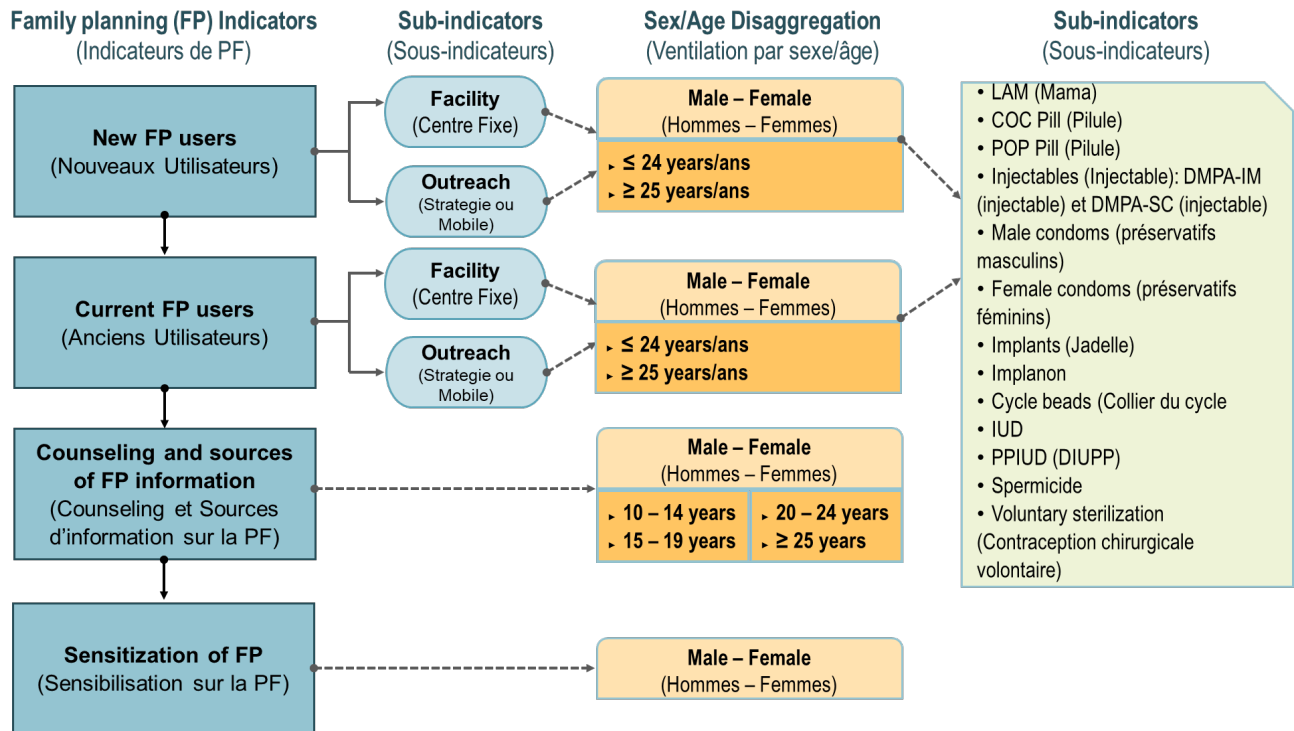
Family planning (FP) Indicators

Age Disaggregation

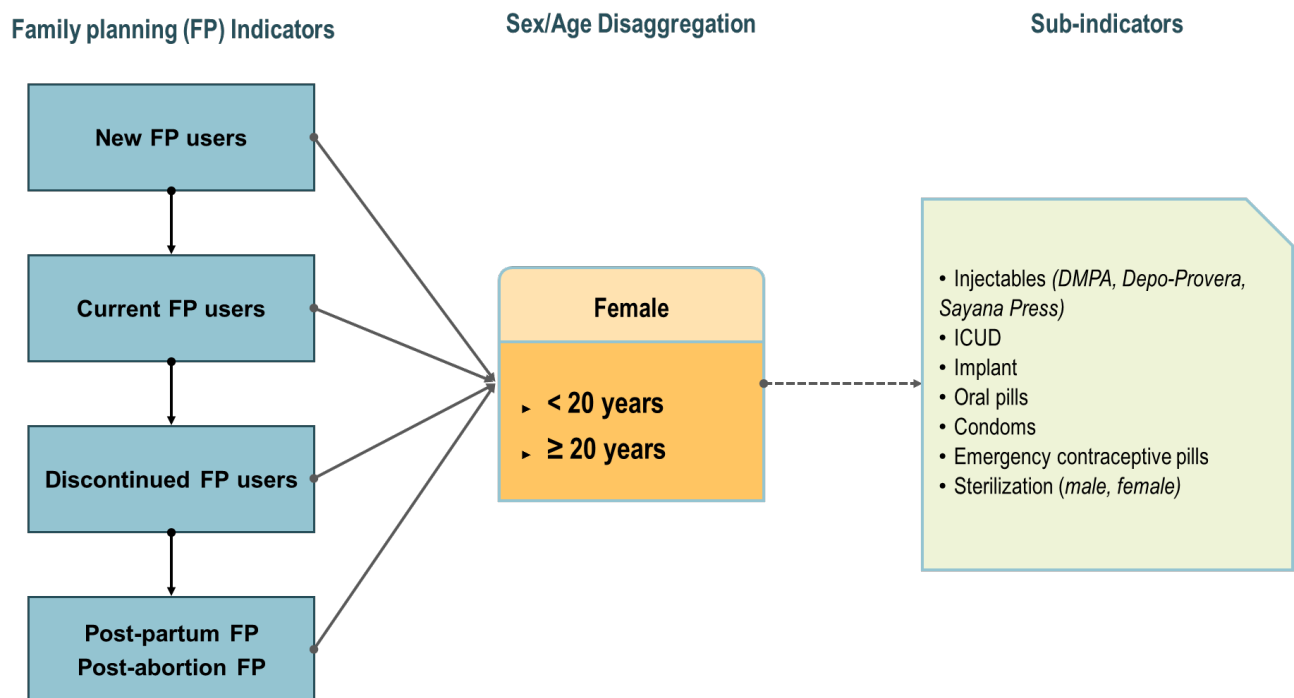
Sub-indicators



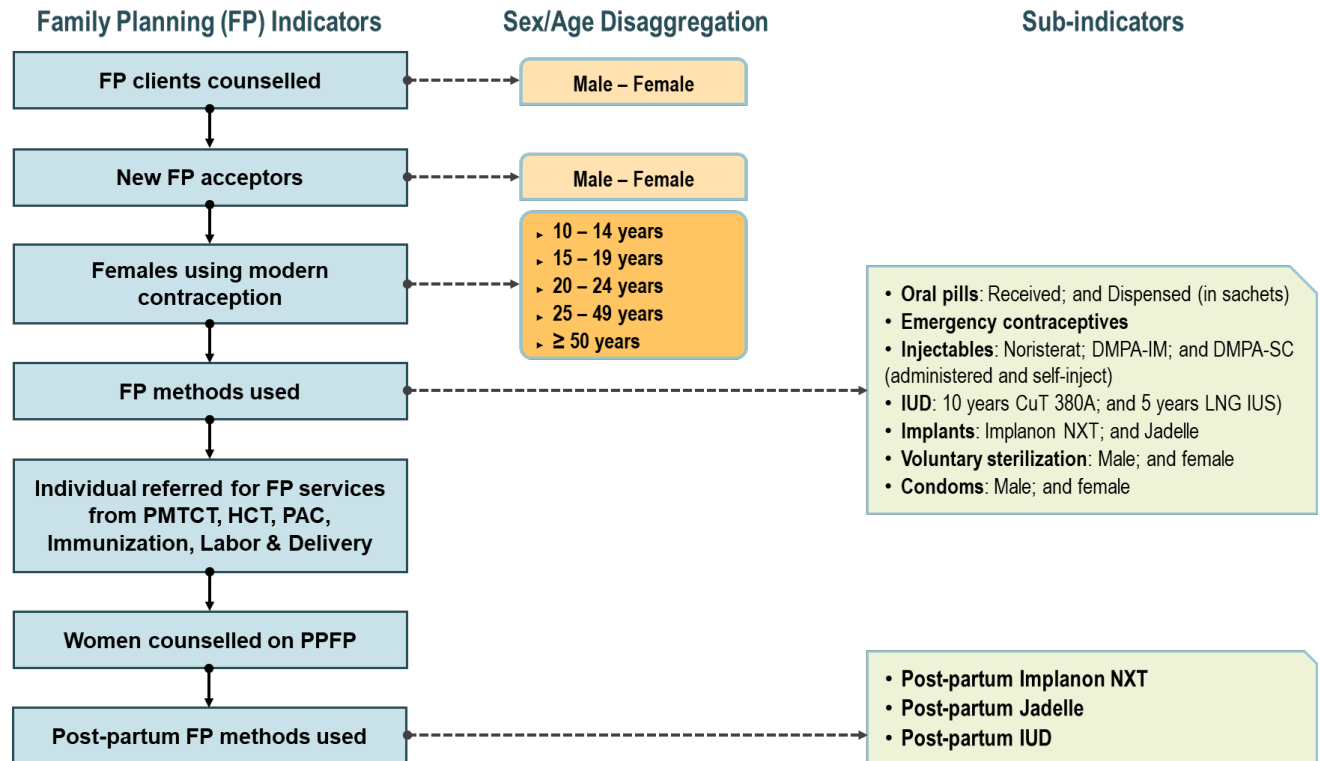
Mali



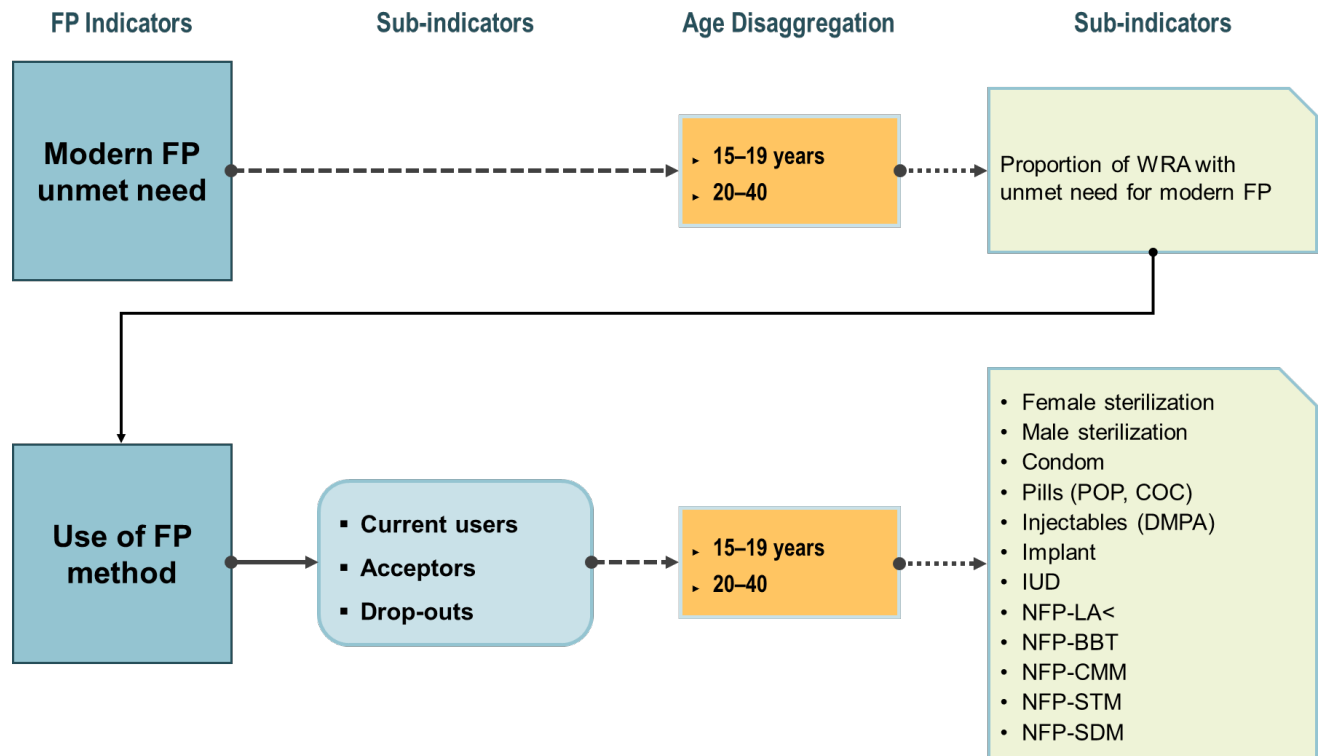
Nepal



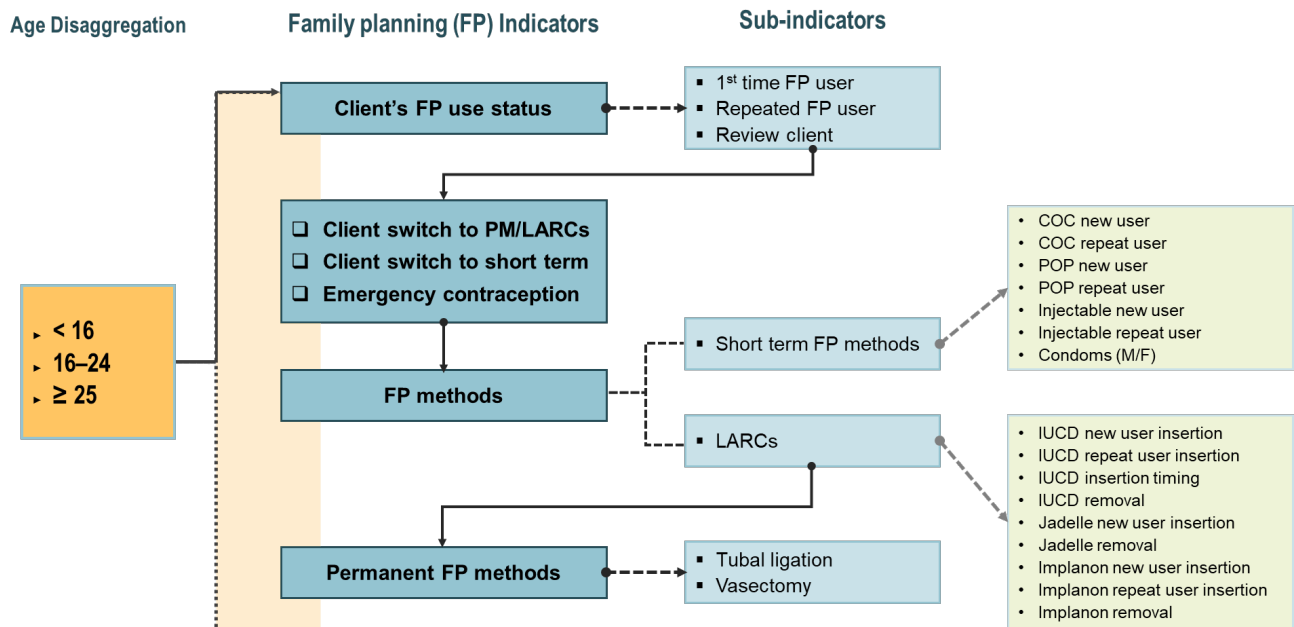
Nigeria



Philippines



Zimbabwe



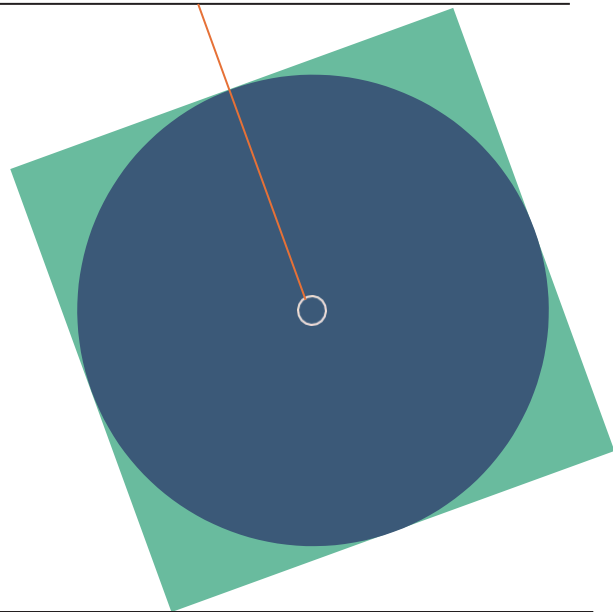
Data for Impact (D4I)

University of North Carolina at Chapel Hill
123 West Franklin Street, Suite 330 Chapel
Hill, North Carolina 27516 USA

Phone: 919-445-6945

D4I@unc.edu

www.data4impactproject.org



This publication was produced with the support of the United States Agency for International Development (USAID) under the terms of the Data for Impact (D4I) associate award 7200AA18LA00008, which is implemented by the Carolina Population Center at the University of North Carolina at Chapel Hill, in partnership with Palladium International, LLC; ICF Macro, Inc.; John Snow, Inc.; and Tulane University. The views expressed in this publication do not necessarily reflect the views of USAID or the United States government. WP-24-270.