Training Curriculum for the Integrated Approach to Family Planning Data Quality Assessment

Track 20

February 2021

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Data for Impact
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Contents

Abbreviations

D4I	Data for Impact
DHS	Demographic and Health Survey(s)
FP	family planning
FPET	Family Planning Estimation Tool
HMIS	health management information system
mCPR	modern contraceptive prevalence rate
MICS	Multiple Indicator Cluster Survey(s)
M&E	monitoring and evaluation
PMA	Performance Monitoring for Action
RDQA	Routine Data Quality Assessment
SS_EMU	Service Statistics to Estimated Modern Use
UNPD	United Nations Population Division
USAID	United States Agency for International Development
VF	verification factor
WPP	World Population Prospects

Illustrative Workshop Agenda

Time	Session	Facilitator	Moderator
WORKSHOP AGENDA			
Time	**Session**	**Facilitator**	**Moderator**
Day 1			
8:00-8:45	Participant registration		
8:45-9:00	Welcome address		
9:00–9:45	Session 1: Introduction to Family Planning Data Quality		
9:45-10:00	Tea Break		
10:00-11:00	Session 2: Data Quality Conceptual Framework and Dimensions		
11:00-12:45	Session 3: Family Planning Data Quality Problems		
12:45-2:00	Lunch Break		
2:00-2:45	Session 4: Data Quality Assessment Methods		
2:45-3:30	Session 5: Introduction to Service Statistics to Estimated Modern Use (SS_EMU)		
3:30-4:00	Tea Break		
Day 2			
9:00-11:00	Session 6: Data Input with the SS_EMU tool		
11:00-11:30	Tea Break		
11:30–1:30	Session 7: Output Review with the SS_EMU tool		
1:30- 2:30	Lunch Break		
2.30–3.30	Session 8: Final Output Review with the SS_EMU		
3:30-4:00	Tea Break		
Day 3			
9:00-9:45	Session 9: Introduction to Routine Data Quality Assessment		
9:45-10:00	Tea Break		
10:00-11:00	Session 10: Identification and Selection of Indicators for Data Quality Verification		
11:00-1:00	Lunch Break		
1:00-2:00	Session 11: Selection of Sites for the Data Quality Verification		
2:00-3:00	Session 12: Site Data Verification		
3:00-4:00	Session 13: Data Quality Analysis and Plan of Action		
Day 4			
9:00-1:30	Fieldwork Practicum: Data Verification		
1:30-2:30	Lunch Break		
2:30-4:00	Plenary: Review field practice results		
4:00-4:15	Closing remarks		

Session 1: Introduction to Family Planning Data Quality

Goal

Understand why collecting family planning data of good quality is important and introduce a holistic approach that family planning (FP) monitoring and evaluation (M&E) officers and program managers can use to ensure the availability of good quality FP data for decision-making and strategic planning.

Learning Objectives

By the end of this training course, each participant will be able to:

- Understand the importance of good family planning (FP) data and information.
- Identify the sources and categories of FP data and information.
- Be able to define and calculate indicators and data elements.
- Determine problems associated with FP data quality.
- Describe the concept of the integrated approach to FP data quality assessment using the Service Statistics to Estimated Modern Use (SS_EMU) and Routine Data Quality Assessment (RDQA) tools.
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Topics

- Defining good quality family planning data
- FP indicator and data element definitions
- Family Planning data records/registers and aggregations
- Data quality challenges
- Introduction to the integrated approach to FP data quality assessment using the Service Statistics to Estimated Modern Use (SS_EMU) and Routine Data Quality Assessment (RDQA) tools

Time: 45 minutes

Methods

- Facilitator presentation
- Discussion

Materials

- Flipcharts
- PowerPoint presentation
- Markers

Session 2: Data Quality Conceptual Framework and Dimensions

Goals

Increase the capacity of FP M&E officers and program managers to monitor and improve the quality of FP data used by country programs for review of progress and performance.

Learning Objectives

By the end of this session, each participant will be able to:

- Understand the data quality conceptual framework tailored for FP.
- Define the dimensions of data quality.
- Identify the steps for assessing, improving, and maintaining data quality.
- Understand why data quality is important for the data use and decision-making process.

Topics

- Process-oriented quality assessment
- Comparing existing practices against best practices
- Institutional context and processes
- Key domains of quality
- Adapting the Data Quality Assessment Framework
- Principles of the Framework

Time: 1 hour

Methods

- Facilitator presentation
- Group exercise
- Plenary: Group presentations and discussions

Materials

- Flipcharts
- PowerPoint presentation
- Markers

Session 3: FP Data Quality Problems

Goal

Improve the capacity of FP M&E officers and program managers to develop and implement proactive processes, and mobilize appropriate resources to monitor and improve data quality.

Learning Objectives

By the end of this session, each participant will be able to:

- Identify data quality issues that are related to the data management and reporting system at each level of the health system.

- Understand the effect of incomplete or missing data on data use and decision making.

- Understand how poor-quality data can lead to distrust in information and bad management decisions.

- Understand how personnel without the required knowledge and skills can increase measurement errors and data mismanagement and misreporting.

- Identify common data aggregation and recording errors.

- Understand how the unclear definition of indicators and data elements can affect data quality and data analysis and use, and determine whether there are any indicators/data elements that are not consistently understood and interpreted.

- Understand how the lack of regular data review and feedback may increase poor data quality.

- Understand how the lack of data management and reporting procedures will negatively affect data quality improvement.

Topics

- Data management and reporting
- Data accuracy, completeness, and timeliness
- Data management and reporting procedures
- Indicator definition
- Capacity building
- Data review
- Decision making

Time: 1 hour and 45 minutes

Methods

- Facilitator presentation
- Group exercises
- Plenary: Group presentations and discussions

Materials

- Flipcharts
- PowerPoint presentation
- Markers

Session 4: Data Quality Assessment Methods

Goal

Improve the knowledge of FP M&E officers and program managers to understand and describe the purpose and analytical method and components of the SS_EMU computerized data review system and the RDQ tool.

Learning Objectives

By the end of this session, each participant will be able to:

- Be knowledgeable about two data quality assessment tools that exist to help identify data issues and measure the quality of data.
- Identify the appropriate data quality tool(s) to apply in different contexts.
- Understand how best to identify and select indicators for data quality assessment.
- Understand how to define, calculate, and interpret data quality metrics.

Topics

- The SS_EMU tool and its components
- The RDQA tool and its components
- Desk review
- Routine data quality assessment
- Contraceptive prevalence rate (CPR) and FP planning commodities
- Definitions of accuracy, timeliness, completeness, precision, reliability, and validity

Time: 45 minutes

Methods

- Facilitator presentation
- Plenary: Group presentations and discussions

Materials

- Flipcharts
- PowerPoint presentation
- Markers

Session 5: Introduction to the Service Statistics to Estimated Modern Use

Goal

Improve the ability of FP M&E officers and program managers to understand and describe the purpose and analytical method and components of the SS_EMU data review system.

Learning Objectives

By the end of this session, each participant will be able to:

- Understand when to use the SS_EMU tool.
- Describe the components of the SS_EMU tool.
- Define and identify the type of data to be used in the SS_EMU tool.

Topics

- Modern contraceptive prevalence rate (mCPR)
- Service statistics; routine data
- FP commodities data
- Population and prevalence data
- Survey data – e.g., Demographic and Health Survey(s) (DHS), Multiple Indicator Cluster Survey(s) (MICS)
- United Nations Population Division (UNPD) World Population Prospects (WPP)

Time: 45 minutes

Methods

- Presentation
- Discussions

Materials

- Flipcharts
- PowerPoint presentation
- Markers

Session 6: Data Input with the SS_EMU Tool

Goal

Review and reinforce the knowledge and skills of FP M&E officers and program managers to customize the SS_EMU tool by selecting, entering, and managing the FP data for analysis and review.

Learning Objectives

By the end of this session, each participant will be able to use the SS_EMU tool to:

- Set up the country and language selection.
- Set up the Family Planning Estimation Tool (FPET).
- Identify the needed service statistics and select the data to input.
- Set up the sector data sources and format the private sector adjustment, if needed.
- Understand the methods to enter and review data.

Topics

- Type of service statistics data
- Survey data for DHS and MICS
- FP commodities
- Private and public sectors
- Contraceptive methods
- Reporting rates

Time: 2 hours

Methods

- Presentation and discussions
- Plenary: Group presentations and discussions
- Group exercise (Optional)

Materials

- Flipcharts
- PowerPoint presentation
- Markers

Session 7: Output Review with the SS_EMU Tool

Goal

Review and reinforce the knowledge and skills of FP M&E officers and program managers to compare survey data with routine data and to identify data trends and inconsistencies.

Learning Objectives

By the end of this session, each participant will be able to:

- Use the SS_EMU tool-generated graphs to make visual comparisons.
- Describe the data trends per method.
- Identify differences between data service statistics.
- Compare the data from service statistics and surveys.
- Explain the differences in trend intervals.
- Understand the overall trend from the EMU compared with the trend from survey data.

Topics

- Comparison of trends
- Service statistics consistency with the most common method captured in surveys
- Consistency with what is understood about contraceptive use in the country/region
- Comparison of indicator trends between EMU and surveys
- Growth rate

Time: 2 hours

Methods

- Presentation
- Group exercise
- Plenary: Group presentations and discussions

Materials

- Flipcharts
- PowerPoint presentation
- Markers

Session 8: Final Output Review with the SS_EMU

Goal

Review and reinforce the knowledge and skills of FP M&E officers and program managers to analyze the quality of data from different sources and select the best information to inform program monitoring.

Learning Objectives

By the end of this session, each participant will be able to:

- Review the SS_EMU displayed graphs to appreciate data trend consistency.
- Compare Users by Method.
- Compare Reporting Rates.
- Make final decisions about service statistic EMU for use in program monitoring.
- Identify indicators with data inconsistency for further quality assessment.

Topics

- Data trend consistency
- Survey data
- Service statistics
- Reporting rates
- FP methods

Time: 1 hour

Methods

- Presentation
- Group exercise
- Plenary: Group presentations and discussions

Materials

- Flipcharts
- PowerPoint presentation
- Markers

Session 9: Introduction to Routine Data Quality Assessment

Goal

Build the capacity and improve the knowledge of FP M&E officers and program managers to understand the purpose of the RDQA and the analytical method used, and to describe the components of the RDQA tool.

Learning Objectives

By the end of this session, each participant will be able to:

- Understand the purpose of the RDQA tool.
- Describe the components of the RDQA tool.
- Define and identify the type of FP data than can be assessed using the RDQA tool.

Topics

- Patient information records in registers and files
- Monthly aggregated reports
- Data element versus indicators
- Data collection, reporting, and management procedures
- Accuracy, timeliness, completeness, reliability, and precision
- Data management skills
- Data management system and verification

Time: 45 minutes

Methods

- Presentation
- Discussions

Materials

- Flipcharts
- PowerPoint presentation
- Markers

Session 10: Identification and Selection of Indicators for Data Quality Verification

Goal

Build the capacity and improve the knowledge of FP M&E officers and program managers to review and prioritize FP indicators with data quality issues that warrant closer investigation to determine the cause(s) of the data quality issues.

Learning Objectives

By the end of this session, each participant will be able to:

- Prioritize and select FP indicators with data quality issues based on the SS_EMU data desk review results.

- Identify the data collection and reporting tools where selected indicators are recorded and/or reported, and determine whether indicator definitions are precise and consistently understood.

- Determine the data quality assessment periods.

Topics

- Data collection tools (registers, files, dossiers, electronic medical records)
- Data reporting tools (monthly and weekly reports, databases, DHIS2)
- Assessment periods
- Definitions of indicators and data elements

Time: 1 hour

Methods

- Presentation
- Plenary: Group presentations and discussions
- Group Exercise (Optional)

Materials

- Flipcharts
- PowerPoint presentation
- Markers

Session 11: Selection of Sites for the Data Quality Verification

Goal

Build the capacity and improve the knowledge of FP M&E officers and program managers to sample RDQA sites (i.e., both health facilities and subnational levels [e.g., district, provincial health offices]) where the RDQA will be applied for data quality verification.

Learning Objectives

By the end of this session, each participant will be able to:

- Define the criteria for site selection based on the volume of FP services.
- Understand the sampling techniques used for site selection.
- Understand and apply the data verification methods aligned with data management and reporting tasks at each level of the health system.

Topics

- Data management and reporting procedures
- Sampling techniques
- Site selection criteria
- Levels of the health system
- Volume of FP services

Time: 1 hour

Methods

- Presentation
- Group exercise
- Plenary: Group presentations and discussions

Materials

- Flipcharts
- PowerPoint presentation
- Markers

Session 12: Site Data Verification

Goal

Build the capacity and improve the knowledge of FP M&E officers and program managers to use existing data collection and reporting tools used by health facilities and the RDQA tool to verify data quality.

Learning Objectives

By the end of this session, each participant will be able to:

- Review and document the availability and completeness of data sources for the selected reporting period.
- Recount recorded data from source documents, and compare the verified numbers with the site reported numbers and explain discrepancies, if any.
- Cross-check indicator data between multiple available data sources to validate the data.

Topics

- Data collection and reporting tools
- Techniques of data aggregation
- Cross-check
- Document review
- Data discrepancies

Time: 1 hour

Methods

- Presentation
- Group exercise
- Plenary: Group presentations and discussions

Materials

- Flipcharts
- PowerPoint presentation
- Markers

Session 13: Data Quality Analysis and Plan of Action

Goal

Build the capacity and improve the knowledge of FP M&E officers and program managers to review graphs and tables, interpret the results, and develop a plan of action for data quality improvement.

Learning Objectives

By the end of this session, each participant will be able to:

- Understand the bar graphs and summary tables generated by the RDQA tool.
- Define the data verification factor (VF) and interpret what it means in terms of indicator data quality.
- Develop a plan of action based on the data verification results.

Topics

- Accuracy, timeliness, and completeness
- Cross-checks
- Reporting performance
- Availability of data sources
- Plan of action

Time: 1 hour

Methods

- Presentation
- Group exercise
- Plenary: Group presentations and discussions

Materials

- Flipcharts
- PowerPoint presentation
- Markers

Fieldwork Practicum: Data Verification

Goal

Provide FP M&E officers and program managers with hands-on experience using the SS_EMU and RDQA tools.

Learning Objectives

By the end of the field work practicum, each participant will be able to:

- Practice doing a desk review using the SS_EMU tool including navigating enter data and the review and interpretation of outputs
- Practice implementing the RDQA tool at a health facility and using the facility data records and registers to do data verification

Topics

- Practice entering data into the SS_EMU tool
- Practice reviewing and interpreting the outputs of the SS-EMU tool
- Practice entering data into the RDQA tool
- Practice reviewing the interpreting the outputs of the RDQA tool

Time: One day

Methods

- Group exercise doing the SS_EMU Desk Review
- Health Facility visit and group exercise implementing the RDQA tool
- Plenary: Group presentations and discussions
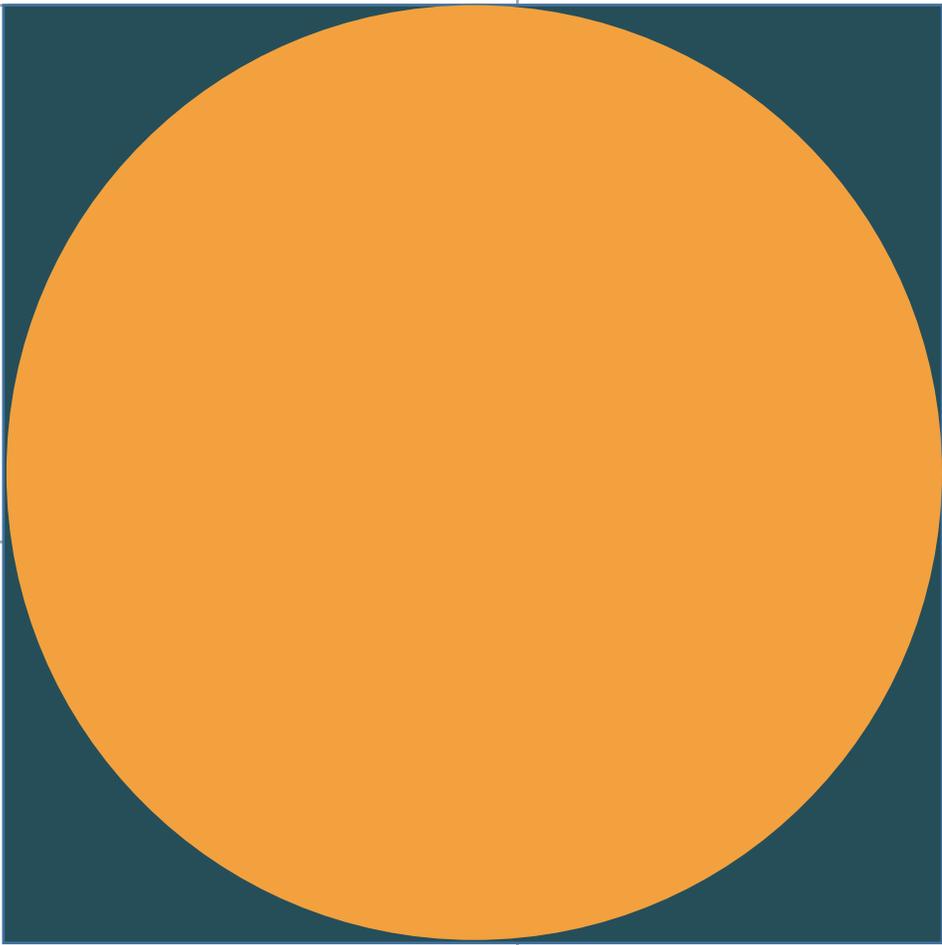- Question and Answer

Materials

- Transportation to health facilities
- Flipcharts
- Markers

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