

In-Country Working Session: FASTR Implementation & RMNCAH-N Service Monitoring Analysis

January 27-30, 2026 | Lusaka

GFF FASTR Team

Agenda

Day 1 -- Laying the Foundation: Introducing FASTR and Configuring the Analytics Platform

Time	Agenda	Facilitator/Presenter
Opening Session		
08:30-09:00	Participant registration	MoH team
09:00-09:10	Welcome and opening remarks	MoH team
09:10-09:20	Icebreakers/Introductions	MoH team
09:20-09:35	Overview of agenda, workshop objectives	GFF FASTR team
Session 1: Overview of the FASTR approach		
09:35-10:30	Overview: FASTR Approaches	GFF FASTR team
Session 2: HMIS data extraction		
10:30-11:30	Data extraction: Rationale and methods	GFF FASTR team
Session 3: Introduction to the FASTR analytics platform		
11:30-12:30	Introduction to the FASTR analytics platform	GFF FASTR team
12:30-14:00	<i>Lunch Break</i>	
14:00-14:30	Getting participants into the platform	GFF FASTR team
Session 4: Configuring the FASTR analytics platform		
14:30-16:30	Configuring the analysis platform	GFF FASTR team
16:30-17:00	Key messages and wrap-up	

Agenda

Day 2 -- Building the Analysis: Applying FASTR Methods and Generating Outputs

Time	Agenda	Facilitator/Presenter
09:00-09:15	Overview of Day 2 agenda	GFF FASTR team
Session 5: Overview of FASTR methods and analytical outputs		
09:15-10:15	Data quality, service utilization, coverage	GFF FASTR team
Session 6: Creating a project		
10:15-11:15	Project creation and settings	GFF FASTR team
Session 7: Creating visualizations		
11:15-12:30	Creating and editing visualizations	GFF FASTR team
12:30-14:00	<i>Lunch Break</i>	
Session 8: Creating reports		
14:30-16:30	Practice creating and editing reports	GFF FASTR team
16:30-17:00	Key messages and wrap-up	

Agenda

Day 3 -- From Analysis to Action: Interpreting Results and Using FASTR for Decision-Making

Time	Agenda	Facilitator/Presenter
09:00-09:15	Overview of Day 3 agenda	GFF FASTR team
Session 8: Interpretation of visualizations		
09:15-10:15	Approaches to support interpretation	GFF FASTR team
Session 9: Creating a Q4 2025 report		
10:15-12:30	Creating short and long reports with country context	GFF FASTR team
12:30-14:00	<i>Lunch Break</i>	
Session 9 (cont'd): Creating a Q4 2025 report		
14:00-15:00	Continue report creation with country context	GFF FASTR team
Session 10: Presenting reports		
14:30-15:30	Present reports, group feedback	GFF FASTR team
Session 11: Action planning		
15:30-16:30	Activity: Action planning	GFF FASTR team
16:30-17:00	Key messages and wrap-up	

Agenda

Day 4 -- Designing the Health Facility Assessment

Time	Agenda	Facilitator/Presenter
09:00-09:15	Overview of Day 4 agenda	GFF FASTR team
Session 12: Overview of FASTR HFA phone survey		
09:15-10:15	HFA overview and questionnaire adaptation guidelines	GFF FASTR team
Session 13: Questionnaire adaptation to the Zambian context		
10:15-12:30	Review questionnaire + hands-on adaptation	GFF FASTR team
12:30-14:00	<i>Lunch Break</i>	
Session 14: Questionnaire adaptation (cont'd)		
14:00-15:00	Continue questionnaire adaptation (in groups)	GFF FASTR team
Session 15: Discussion: HFA adapted questionnaire		
14:30-15:30	Discuss adapted questionnaire in plenary	GFF FASTR team
Session 16: Discussion: HFA priorities and data use		
15:30-16:30	HFA priorities and data use case in Zambia	GFF FASTR team
16:30-17:00	Key messages and wrap-up	

Workshop Objectives

- Prepare MoH for participation in the multi-country workshop
- Strengthen capacity for disruption analysis and data extraction
- Configure the FASTR analytics platform for Zambia
- Produce the first quarterly report
- Adapt the phone survey questionnaire to the Zambian context
- Use data downloader tools for DHIS2

Scope of Work

| Disruption Analysis Activities

- Data extraction and configuration of analytics platform
- Produce first quarterly report
- Review results and contextualize findings (with relevant program teams)

| Phone Survey Activities

- Adaptation of questionnaire (with program input)

| Capacity Building

- Training on data downloader for all with DHIS2 access
- Hybrid format: face-to-face and online

Expected Outputs

- Adapted phone survey questionnaire
- First quarterly report draft
- Trained MoH team on data downloader tools
- Roadmap for participation in Abuja workshop

Session 1: Overview of the FASTR approach

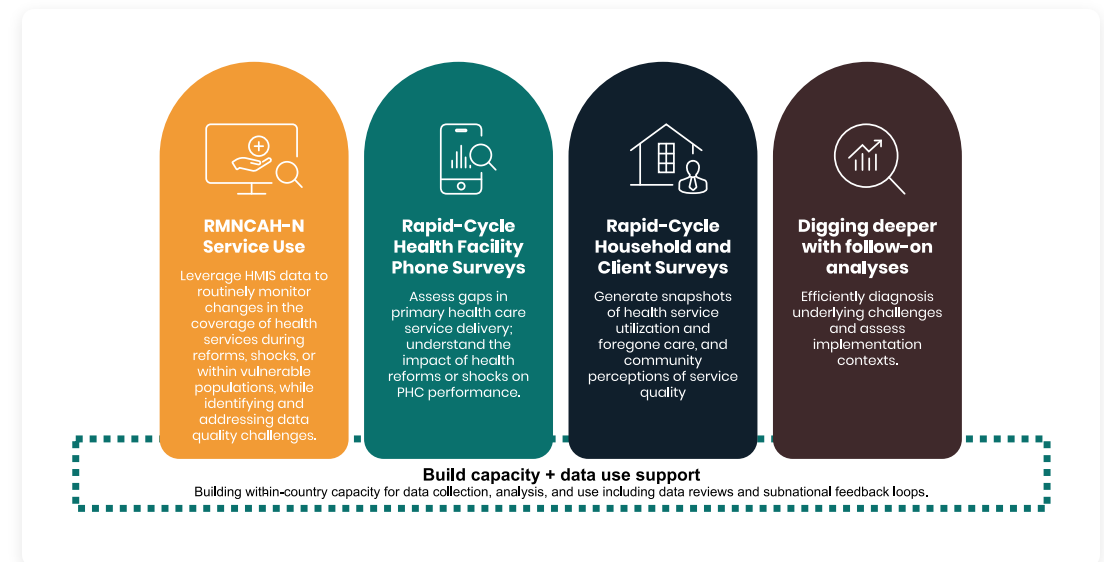
Introduction to FASTR

The Global Financing Facility (GFF) supports country-led efforts to strengthen the use of timely data for decision-making, with the goal of improving primary healthcare (PHC) performance and RMNCAH-N outcomes.

Frequent Assessments and Health System Tools for Resilience (FASTR) is the GFF's rapid-cycle analytics framework for monitoring health system performance using high-frequency data.

FASTR brings together four complementary technical approaches:

1. Routine HMIS data analysis
2. Health facility phone surveys
3. High-frequency household phone surveys
4. Follow-on, problem-driven analyses



What FASTR does with routine HMIS data

FASTR works directly with Ministries of Health to transform routine HMIS data into actionable evidence for policy and program management.

Using facility-level data, the approach focuses on three core analytic functions:

Assess data quality

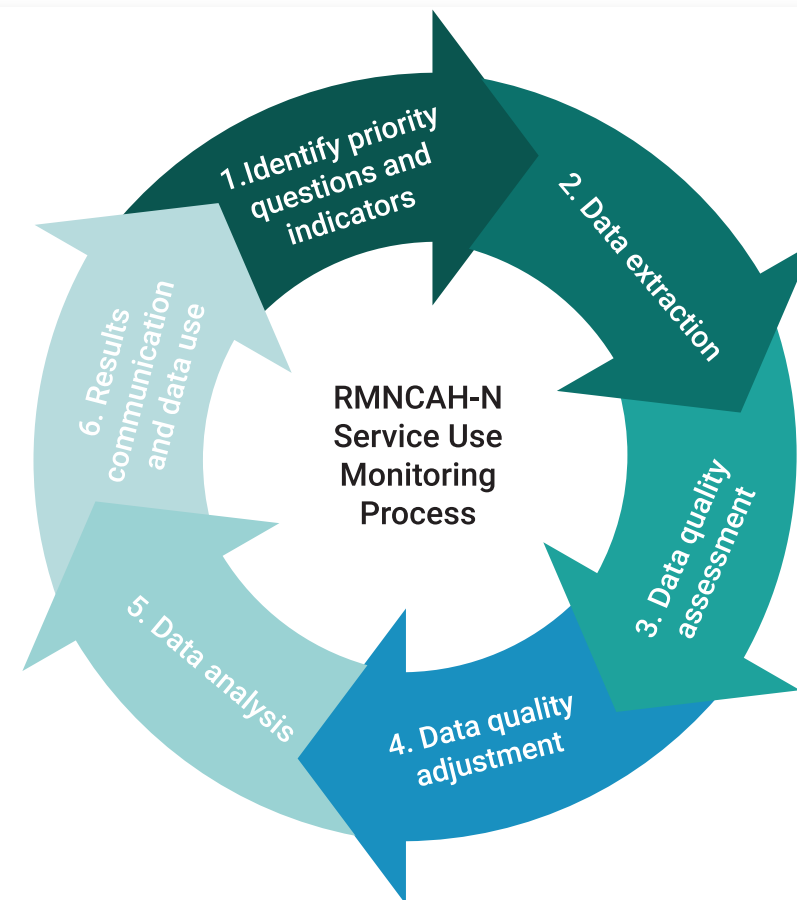
Identify key issues related to completeness, outliers, and internal consistency.

Adjust for data quality limitations

Apply transparent, indicator-specific methods to improve the reliability of trend analysis.

Analyze service use and coverage trends

Track changes in priority RMNCAH-N services and compare progress against country priorities and benchmarks.



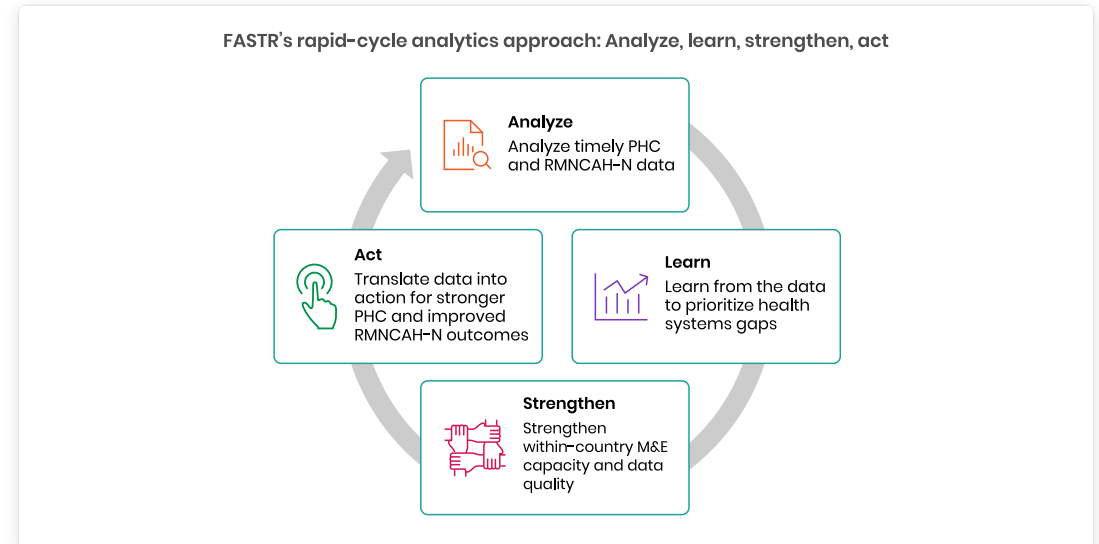
Why rapid-cycle analytics?

Routine health information systems are a critical source of data, but they are often underused due to concerns about data quality and long delays between data collection and analysis. Traditional household and facility surveys, while essential, are resource-intensive and infrequent.

FASTR's rapid-cycle analytics address this gap by providing:

- Timely insights aligned with country decision cycles
- Continuous learning rather than one-off assessments
- Direct feedback loops between data, analysis, and action

During the COVID-19 pandemic, this approach was applied in over 20 countries to monitor disruptions to essential RMNCAH-N services and inform response and recovery planning.



Focus of the analysis

| Core indicators

FASTR prioritizes a core set of RMNCAH-N indicators that:

- Represent key service delivery contacts across the continuum of care
- Have relatively high reporting completeness and volumes
- Serve as proxies for broader service delivery performance

Outpatient consultations are included as a proxy for overall health service use. The indicator set can be expanded to reflect country-specific priorities.

| Core data quality metrics

Analysis is anchored in a standardized set of data quality metrics, including:

- Reporting completeness
- Extreme value (outlier) detection
- Consistency across related indicators

These metrics are summarized into an overall data quality score to support interpretation and comparison across areas.

FASTR approach to routine data analysis

The FASTR approach follows a three-step workflow:

| 1. Assess data quality

Identify issues related to completeness, outliers, and internal consistency at national and subnational levels.

| 2. Adjust for data quality limitations

Apply transparent, indicator-specific corrections to improve the reliability of trend analysis.

| 3. Analyze service delivery

Quantify changes in priority service volumes and compare coverage trends against country targets.

This enables continuous, subnational monitoring while data quality is systematically improved.

Session 2: HMIS data extraction

Why extract data from DHIS2?

| Data quality adjustment

The FASTR approach focuses on data quality adjustments to expand the analyses countries can do with DHIS2 data and to generate more robust estimates.

The FASTR methodology includes specific approaches to:

- Identify and adjust for outliers
- Adjust for incomplete reporting
- Apply consistent data quality metrics

These adjustments require processing that cannot be done within DHIS2's native analytics.

Why extract data from DHIS2?

| Analysis complexity

The FASTR approach uses more advanced statistical methods, such as regression analysis, which are not available in DHIS2. While DHIS2 can plot trends over time using raw data, FASTR can go further by:

- Identifying significant increases or decreases in service volume
- Adjusting for data quality issues
- Accounting for expected seasonal variations
- Comparing key periods, such as before and after a reform

The choice between DHIS2 and the FASTR approach should be guided by the specific purpose of your analysis.

Data format and granularity

Data should be downloaded for each **indicator of interest**, at **facility level**, and **monthly** for the **period of interest**.

- Data should be saved in **long format** meaning each row represents a single observation or measurement
- Data should be saved in **.csv format** and can be saved in either a single .csv file or multiple .csv files

| Why monthly facility level data?

We want to use the most granular data we have access to in order to make more fine tuned assessments for data quality. Using monthly facility level data allows us to conduct the most robust analysis.

Key variables

The data extracted should include the following required elements:

Element	Description
Org units	Organizational unit identifier
Period	Time period of the data
Indicator name	Name of the indicator
Total/count	The aggregated value

How much data?

| Initial FASTR analysis

- Download approximately **five years** of historical data
- Exact period depends on data availability and consistency in indicator definitions

| Routine update to FASTR analysis

- Download new data covering the most recent months not previously included (usually **three months** for quarterly implementation)
- Include the **three preceding months** as recent data is often subject to changes due to late reporting or data quality adjustments

Data extraction tools

We offer two tools for bulk DHIS2 data extraction:

API Script (Google Colab)

- Input login credentials, specify timeframes, indicators, and administrative levels
- Download data as a .csv file

Data Downloader

- More intuitive, streamlined interface
- Recommended for most users

Both tools enable efficient data extraction, and we provide training resources to support their use.

DHIS2 Data Downloader

The Data Downloader is a desktop application for extracting data from DHIS2.

Key features:

- Connect to any DHIS2 instance
- Browse and select data elements and indicators
- Download facility-level data in CSV format
- Maintain download history

Download from GitHub:

<https://github.com/worldbank/DHIS2-Downloader/releases/>

Facilitator will demonstrate the Data Downloader

Session 3: Introduction to the FASTR analytics platform

Introduction to the FASTR Analytics Platform

The FASTR analytics platform is a web-based tool for data quality assessment, adjustment, and analysis of routine health data.

Key features:

- Upload and analyze data from DHIS2 and other sources
- Built-in statistical methods for data quality adjustment
- User-friendly interface for running analyses
- Flexible visualization and export options

In this session, we will provide a conceptual walkthrough of the platform and its capabilities.

Live Demo: Platform Access & Roles

In this demo, we will:

- Navigate to the FASTR platform
- Explore user roles: Administrator, Editor, Viewer
- Review user management and permissions
- Understand the workflow for uploading data and making analytical decisions

Facilitator will demonstrate in the live platform



Lunch Break

90 minutes

Back at 14:00

Session 4: Configuring the FASTR analytics platform

Activity: Setting Up Admin Areas

In this hands-on session, we will configure:

- Admin areas (regions, districts)
- Facility structure
- Indicator definitions

Participants will work directly in the platform

Activity: Importing Data

In this hands-on session, we will:

- Review data format requirements
- Walk through the import process
- Handle validation and error checking

Participants will import their country's data

Activity: Installing and Running Modules

In this hands-on session, we will:

- Review available analysis modules
- Install required modules
- Run initial analyses

Participants will configure and run modules on their data

Day 1 Key Messages

Today we covered:

- Overview of the FASTR approach and methodology
- Data extraction methods and tools for DHIS2
- Introduction to the FASTR Analytics Platform
- Initial platform configuration for Zambia

Looking Ahead to Day 2

Tomorrow we will focus on:

- Creating your first project in the platform
- Building visualizations from your data
- Generating reports for decision-making

Day 2

Recap

On Day 1, we covered:

- The FASTR approach and rapid-cycle analytics methodology
- Data extraction from DHIS2 using the Data Downloader
- Introduction to the FASTR Analytics Platform
- Platform configuration: admin areas, data import, modules

Day 2 Focus

Today we will:

- Explore FASTR methods for data quality and analysis
- Create and configure projects
- Build visualizations
- Generate reports

Session 5: Overview of FASTR methods and analytical outputs

Data quality assessment

Understanding the reliability of routine health data

Why talk about data quality?

The challenge: Health facilities report data every month, but sometimes:

- Numbers seem too high or too low
- Facilities forget to report
- Related numbers don't match up

The impact: Bad data leads to bad decisions

- We might think services are improving when they're not
- We might miss real problems in certain areas
- Resources might go to the wrong places

FASTR's solution: Check data quality systematically, fix what we can, and be transparent about limitations

Three simple questions about data quality

1. Are facilities reporting regularly?

- Completeness: Did we get reports from facilities this month?

2. Are the numbers reasonable?

- Outliers: Are there any suspiciously high values?

3. Do related numbers make sense together?

- Consistency: Do related services show expected patterns?

These three questions help us understand if we can trust the data for decision-making.

Approach to data quality adjustment

The Data Quality Adjustment module (Module 2 in the FASTR analytics platform) systematically corrects two common problems in routine health facility data:

1. **Outliers** - extreme values caused by reporting errors or data entry mistakes
2. **Missing data** - from incomplete reporting

Rather than simply deleting problematic data, this module replaces questionable values with statistically sound estimates based on each facility's own historical patterns.

| Four adjustment scenarios

The module produces four parallel versions of the data:

Scenario	Description
None	Original data, no adjustments
Outliers only	Only outlier corrections applied
Completeness only	Only missing data filled in
Both	Both types of corrections applied

This allows analysts to understand how sensitive their results are to different data quality assumptions.

Service utilization analysis

The Service Utilization module (Module 3 in the FASTR analytics platform) analyzes health service delivery patterns to detect and quantify disruptions in service volumes over time.

Key capabilities:

- Identifies when health services deviate significantly from expected patterns
- Measures magnitude of disruptions at national, provincial, and district levels
- Distinguishes normal fluctuations from genuine disruptions requiring investigation

| Two-stage analysis process

Part 1: Control chart analysis

- Model expected patterns using historical trends and seasonality
- Detect significant deviations from expected volumes
- Flag disrupted periods

Part 2: Disruption quantification

- Use panel regression to estimate service volume changes
- Calculate shortfalls and surpluses in absolute numbers

Session 6: Creating a project

Activity: Creating a Project

In this hands-on session, we will:

- Set up a new project
- Configure project settings
- Select indicators and time periods
- Apply best practices for project organization

Participants will create their first project

Session 7: Creating visualizations

Activity: Creating Visualizations

In this hands-on session, we will:

- Explore available chart types
- Create and customize visualizations
- Export charts for use in reports

Participants will build visualizations from their analysis



Lunch Break

90 minutes

Back at 14:00

Session 8: Creating reports

Activity: Creating Reports

In this hands-on session, we will:

- Use report templates
- Generate automated reports
- Customize report content and layout

Participants will create their first quarterly report draft

Day 2 Key Messages

Today we covered:

- Overview of FASTR methods for data quality and analysis
- Creating and configuring projects
- Building visualizations from data
- Generating reports in the platform

Looking Ahead to Day 3

Tomorrow we will focus on:

- Interpreting visualizations for decision-making
- Creating the Q4 2025 quarterly report
- Presenting findings effectively
- Action planning for continued use

Day 3

Recap

On Day 2, we covered:

- FASTR methods for data quality assessment and adjustment
- Creating and configuring projects in the platform
- Building visualizations from Zambia data
- Generating reports

Day 3 Focus

Today we move from analysis to action:

- Deep dive into interpretation of results
- Create the Q4 2025 quarterly report
- Present findings to the group
- Develop action plans for continued work

Session 8: Interpretation of visualizations

Analytical thinking & interpretation

Content to be developed

This section will cover:

- Frameworks for interpreting FASTR outputs
- Connecting data patterns to programmatic meaning
- Common interpretation pitfalls to avoid
- Building analytical thinking skills

Session 9: Creating a Q4 2025 report

Generating quarterly reporting products

Content to be developed

This section will cover:

- Quarterly reporting workflow
- Using the FASTR platform for automated reports
- Quality assurance for reports
- Distribution and feedback mechanisms



Lunch Break

90 minutes

Back at 14:00

Session 10: Presenting reports

End user mapping

End user mapping helps ensure that our outputs will meet the real needs of our end users.

| Key questions

1. Who is my end user?
2. What does this end user need to accomplish with the report?
3. What information are they most interested in?
4. What do they like/not like about current reports?
5. How do they like to receive their information?

Next Steps & Action Planning

Key actions to take after this working session:

- Finalize adapted phone survey questionnaire
- Complete first quarterly report draft
- Train remaining MoH team on data downloader tools
- Prepare roadmap for participation in Abuja workshop

Quarterly Reporting Cycle

Establish a sustainable reporting rhythm:

- Define quarterly report timeline and responsibilities
- Set up data extraction schedule
- Establish review and approval process
- Plan dissemination to stakeholders

Continued Platform Usage

Maintain momentum with the FASTR platform:

- Regular data updates and quality checks
- Expanding analysis to additional indicators
- Building capacity across MoH teams
- Documentation of lessons learned

Day 3 Key Messages

Today we covered:

- Interpretation of FASTR visualizations
- Creation of the Q4 2025 quarterly report
- Presentation and group feedback
- Action planning for continued platform use

Looking Ahead to Day 4

Tomorrow we will focus on:

- Overview of the FASTR HFA phone survey
- Reviewing the questionnaire structure
- Adapting the questionnaire for Zambia
- Planning HFA priorities and data use

Day 4

Recap

On Day 3, we covered:

- Interpretation of FASTR visualizations
- Creation of the Q4 2025 quarterly report
- Presentation of findings and group feedback
- Action planning for continued platform use

Day 4 Focus

Today we design the Health Facility Assessment:

- Overview of the FASTR HFA phone survey
- Review questionnaire structure
- Adapt questionnaire for Zambia context
- Plan HFA priorities and data use

Session 12: Overview of FASTR HFA phone survey

Health Facility Assessment Phone Survey

Complementing routine data with facility-level insights

Survey Objectives

The FASTR HFA phone survey is designed to:

1. **Monitor** service availability, readiness, and functioning of PHC facilities over time (with emphasis on RMNCAH-N services)
2. **Characterize** and assess effect of shocks on PHC functioning
3. **Inform** and assess implementation of interventions for resilient PHC systems
4. **Enhance timeliness** by supplementing large-scale in-person surveys with a rapid-cycle phone approach

Tool Design

Framework alignment:

- Aligned with WHO/UNICEF Primary Health Care Measurement Framework (2022)

Question sources:

- WHO Harmonized Health Facility Assessment
- WHO Service Availability and Readiness Assessment (SARA)
- World Bank Service Delivery Indicators (SDI)
- DHS Service Provision Assessment (SPA)
- USAID MOMENTUM

Implementation:

- Phone-based survey to facility managers/Officers in Charge
- Target duration: 30 minutes
- Quarterly contacts
- Modular design for flexibility

Why phone surveys?

Routine HMIS data tells us *what* is happening:

- How many services were delivered
- Which facilities reported
- Where there might be data quality issues

But HMIS data can't tell us *why*:

- Is the facility actually open?
- Are essential supplies available?
- Are trained staff present?
- What challenges are facilities facing?

Phone surveys fill this gap by contacting facilities directly to understand context.

What the survey covers

1. Is the facility open and functioning?
2. Which services are currently available?
3. Are essential medicines in stock?
4. What staff are present today?
5. What challenges is the facility facing?

Results help explain *why* routine data might show certain patterns.

Questionnaire adaptation guidelines

Why adapt the questionnaire?

The standard FASTR questionnaire is a **starting point**, not a final product.

Every country needs to:

- Translate into local language(s)
- Use local health system terminology
- Focus on nationally relevant indicators
- Adjust for local facility types
- Match local supply/medicine names

Adaptation principles

Keep what matters:

- Core questions on operational status
- Essential supply availability
- Basic service provision

Adapt to context:

- Local terminology and naming
- Country-specific priority services
- Relevant response categories

Don't add too much:

- Phone surveys should stay short (15–30 min)
- Focus on actionable information
- Avoid "nice to know" questions

Session 13: Questionnaire adaptation to the Zambian context

Questionnaire structure and review

Standard questionnaire sections

Section	Content	Duration
A. Facility ID	Verify facility details	2 min
B. Operational status	Current functioning, closures	3 min
C. Service availability	Services currently offered	5 min
D. Staffing	Staff presence by cadre	3 min
E. Essential supplies	Stock status	5 min
F. Infrastructure	Water, electricity	2 min
G. Challenges	Current issues (open-ended)	5 min

Total: ~25 minutes

Review process

For each section, ask:

1. Is this question relevant for our context?
2. Is the wording clear in local language?
3. Are the response options complete?
4. Should we add country-specific items?
5. Can we remove anything non-essential?

Goal: A questionnaire that is locally relevant while maintaining comparability with the FASTR standard.

Hands-on questionnaire adaptation

Activity overview

What we'll do:

Work in groups to adapt the standard FASTR questionnaire to our country context.

Groups:

- Group 1: Sections A-B (Facility ID, Operational status)
- Group 2: Section C (Service availability)
- Group 3: Section D-E (Staffing, Essential supplies)
- Group 4: Sections F-G (Infrastructure, Challenges)

Adaptation checklist

For each question in your section:

- ☐ Is the question clear in local language?
- ☐ Are response options appropriate?
- ☐ Should we add country-specific items?
- ☐ Can we simplify without losing information?
- ☐ Does skip logic make sense?

Document your changes for group discussion.

Group discussion

After working in groups, we'll:

1. **Present adaptations** - Each group shares key changes
2. **Discuss trade-offs** - What did we add vs. remove?
3. **Reach consensus** - Agree on final adaptations
4. **Plan pre-testing** - How will we test the adapted questionnaire?



Lunch Break

90 minutes

Back at 14:00

Session 16: Discussion: HFA priorities and data use

HFA priorities and data use

Using survey results

Phone survey results should inform:

1. Routine data interpretation

- Explain patterns in HMIS data
- Validate data quality concerns

2. Targeted support

- Identify facilities needing intervention
- Prioritize supervision visits

3. Supply chain management

- Track stockout patterns
- Inform distribution planning

Linking survey to routine data

Example use cases:

HMIS pattern	Survey question	Insight
Facility stopped reporting	Is facility open?	Closed vs. reporting failure
Sudden drop in services	Stock availability?	Stockout impact
Low immunization numbers	Vaccine in stock?	Supply vs. demand issue

Goal: Triangulate multiple data sources for better decision-making.

Next steps for HFA implementation

1. Finalize adapted questionnaire
2. Train enumerators
3. Establish call schedule
4. Conduct pilot round
5. Analyze and link to HMIS
6. Report and use findings

Key question: How will HFA results feed into your routine monitoring and decision-making processes?

Next Steps & Action Planning

Key actions to take after this working session:

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Quarterly Reporting Cycle

Establish a sustainable reporting rhythm:

- Define quarterly report timeline and responsibilities
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Continued Platform Usage

Maintain momentum with the FASTR platform:

- Regular data updates and quality checks
- Expanding analysis to additional indicators
- Building capacity across MoH teams
- Documentation of lessons learned

Workshop Closing

Thank you for your participation!

Over the past four days, we have:

- Configured the FASTR platform for Zambia
- Created the first quarterly RMNCAH-N report
- Adapted the HFA questionnaire for local context
- Built capacity for ongoing analysis and reporting

Stay Connected

Continue the journey:

- Platform access and support
- Quarterly report submissions
- Multi-country workshop in Abuja
- Ongoing technical assistance from GFF team

Thank You

FASTR Working Session - Zambia
January 27-30, 2026
Lusaka

Thank You!

Questions & Discussion

Contact Information

FASTR Team

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