Every Newborn-Measurement Improvement for Newborn & Stillbirth Indicators EN-MINI-PRISM Tools for Routine Health Information Systems

Bangladesh Pilot Study Report

December 2024

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For any questions about the tools or implementing any part of the assessment, please contact: enapmetrics3@lshtm.ac.uk

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Detailed list of results tables are shown in Appendix 1

Abbreviations

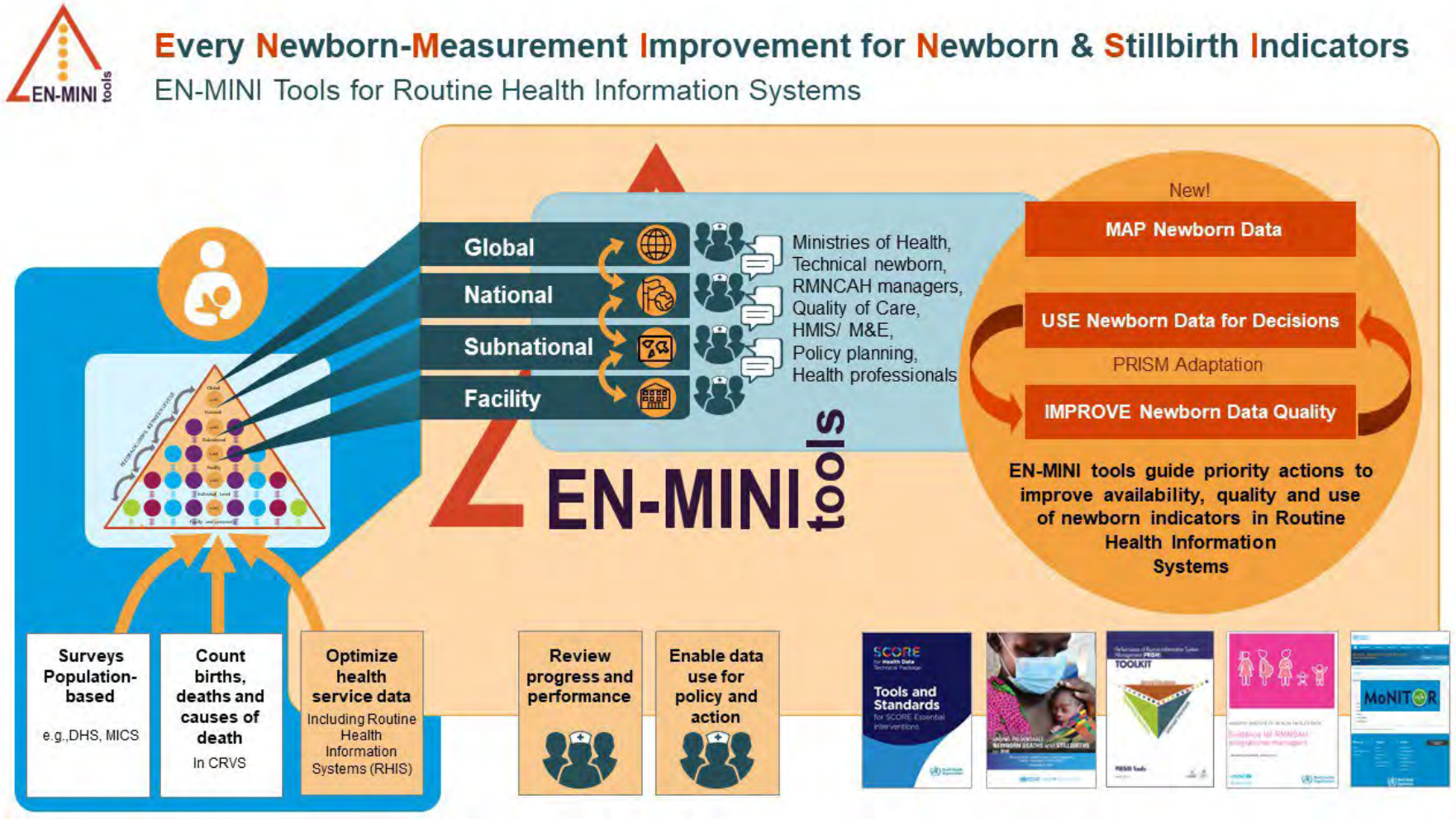
D4I	Data for Impact
DHIS2	District Health Information Software version 2
ENAP	Every Newborn Action Plan
EN-BIRTH	Every Newborn Birth Indicator Research Tracking in Hospitals study
EN-BIRTH-2	Every Newborn Birth Indicator Research Tracking in Hospitals 2 study
EN-MINI Tools	Every Newborn-Measurement Improvement for Newborn and Stillbirth Indicators Tools
EN-MINI-PRISM Tools	Every Newborn-Measurement Improvement for Newborn and Stillbirth Indicators—Performance of Routine Information System Management Tools
eRHIS	Electronic Routine Health Information Systems
HMIS	Health Management Information Systems
IHI	Ifakara Health Institute
KMC	Kangaroo mother care
LSHTM	London School of Hygiene & Tropical Medicine
MAT	Management Assessment Tool (abbreviation for “Management Assessment EN MINI PRISM Tool 4”)
MOH	Ministry of Health
OBAT	Organizational and Behavioral Assessment Tool (abbreviation for “Organizational and Behavioral Assessment EN-MINI-PRISM Tool 6”)
PRISM	Performance of Routine Information System Management
RHIS	routine health information systems
USAID	United States Agency for International Development
WHO	World Health Organization

Executive Summary

EN-MINI-PRISM Tools at a Glance

- Designed to close the data gap for high-priority core newborn and stillbirth indicators for every newborn to survive and thrive.
- User-friendly practical tools to MAP, IMPROVE, and USE newborn and stillbirth data for coverage and quality of care.
- Full and free access to digital data collection forms and automated analysis for reporting and synthesis is provided on the EN-MINI Tools website.
- Includes adaptations of Performance Routine Information System Management (PRISM) tools that are already used in more than 40 countries.
- Facilitates implementation of existing routine health information systems (RHIS) guidance.
- Enables users to comprehensively assess RHIS for newborn and stillbirth data, generating the detailed information needed to prioritize action to improve data quality and use.
- Flexibility for country contextualization with national priority indicators.
- Emphasizes subnational data and health facility routine source data documents.

Figure 1. Every Newborn-Measurement Improvement for Newborn & Stillbirth Indicators (EN-MINI) Tools infographic - for animated version of see EN-MINI Tools website



Overview of Actionable Findings

Newborn and stillbirth core indicator routine data assessment from the pilot EN-MINI-PRISM Tools assessment in the Kushtia District of Bangladesh identified:

Introduction

Closing the Routine Data Gap for Newborns and Stillbirths

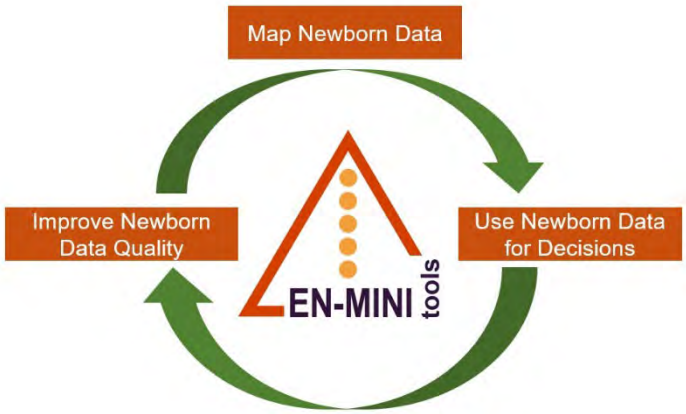
Every newborn has the right to survive and thrive, yet an estimated 4.2 million die globally each year as newborns and stillbirths.[1-3] Timely and accurate data on coverage, equity, and quality of care are essential to track progress toward ending preventable stillbirths, newborn deaths, and disabilities.[4] However, the settings with the highest burden of deaths have the least data on coverage and quality of care—the "inverse data law."[5]

What are the EN-MINI Tools?

The purpose of the Every Newborn-Measurement Improvement for Newborn and Stillbirth Indicators (EN-MINI) tools for Routine Health Information Systems (RHIS) is to enable countries to have the right data at the right time and at the right level of the healthcare system (Figure 1).[3,4] The EN-MINI Tools are free and have ready-to-use digital data collection platforms and generate automated reports. Improving newborn data is a priority of the Every Newborn Action Plan (ENAP) to accelerate progress and ensure every newborn survives and thrives.[4]

The tools are organized in three categories: (1) MAP newborn data availability, (2) assess USE of newborn data for decisions, and (3) identify how to IMPROVE newborn data quality (Figure 2). The USE and IMPROVE tools are adapted from the Performance of Routine Information System Management (PRISM) series.[6,7]

Figure 2. Every Newborn-Measurement Improvement for Newborn & Stillbirth Indicators (EN-MINI) Tools categories



Why focus on core indicator data?

Core indicator data are vital to guide action and track progress for health workers, managers, and policy makers at all levels in the data pyramid, as illustrated by the central gold data point circles in Figure 2. EN-MINI Tools capture the data-enabling environment for frontline health workers

documenting data elements, data transmission processes up the data pyramid, and use of data at all levels. The tools reinforce the dual focus needed to simultaneously strengthen USE of data, even though it is not perfect, with ongoing efforts to IMPROVE data quality (Figure 2).

The EN-MINI Tools are intended to identify gaps in newborn and stillbirth RHIS data availability, quality, and use. This report summarizes findings for the 2021 pilot of EN-MINI-PRISM Tools 1–6 in the Kushtia District in the Khulna Division of Bangladesh in 2021. An accompanying Map Newborn Data EN-MINI Tool 0 report details data elements for newborn and stillbirth indicators.

How were the EN-MINI Tools developed?

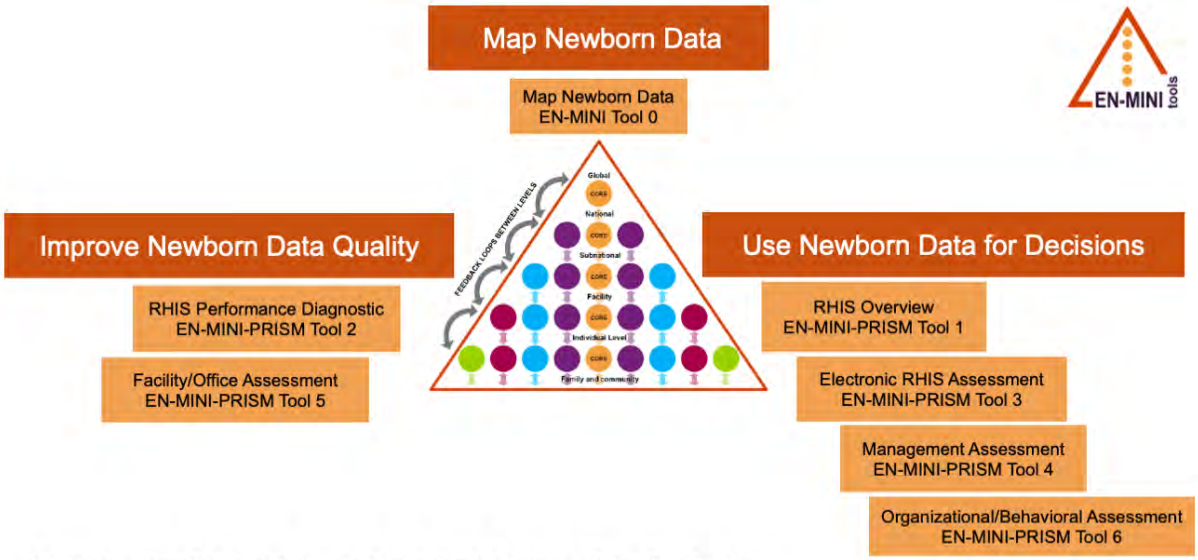
Previous research, such as the Every Newborn Birth Indicator Research Tracking in Hospitals (EN-BIRTH) study (2016–2020), assessed measurement coverage and quality of newborn and maternal care in Bangladesh, Nepal, and the United Republic of Bangladesh.[8-10] This EN-BIRTH study highlighted the potential for routine register newborn data but found newborn data quality in routine registers varied.

The novel EN-MINI Tools were designed and made available through collaborative implementation research, the EN-BIRTH 2 study (2020–2022). Research partners were The London School of Hygiene & Tropical Medicine (LSHTM) UK, Ifakara Health Institute (IHI) Tanzania, icddr,b Bangladesh, and Data for Impact (D4I), and funded by United States Agency for International Development (USAID). An expert advisory group of colleagues from the World Health Organization (WHO), the United Nations Children's Fund (UNICEF), the national governments of Bangladesh and the United Republic of Tanzania, and additional program newborn measurement experts and academics provided important guidance.

EN-MINI Tools comprehensively measure RHIS performance for core newborn and stillbirth indicators collected at health facilities. The seven tools are organized in the three categories: MAP newborn data availability, assess USE of newborn data for decisions, and identify how to IMPROVE newborn data quality (Figure 3).

The novel MAPPING tool (EN-MINI Tool 0) generates an automated report showing newborn data elements as they move up the data pyramid. The USE and IMPROVE Tools (EN-MINI-PRISM Tools 1–6) are adaptations of the Performance of Routine Information System Management (PRISM) tools designed by MEASURE Evaluation.[6,7] More details of the EN-MINI-PRISM Tools are shown in Appendix 2 and on the EN-MINI Tools website.

Figure 3. Every Newborn-Measurement Improvement for Newborn & Stillbirth Indicators (EN-MINI) Tools



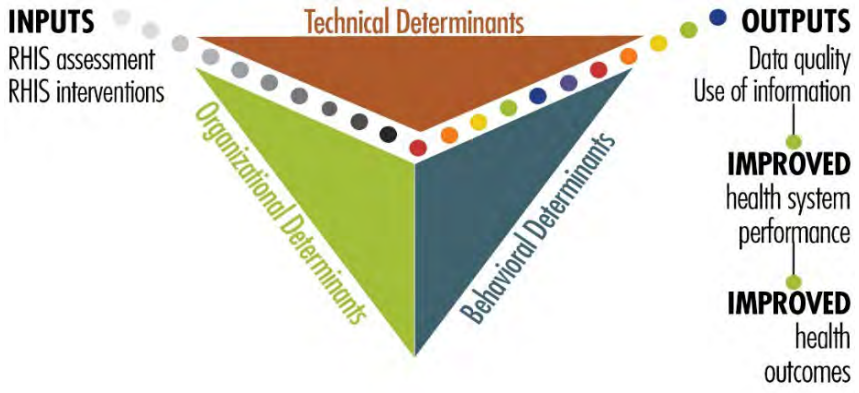
Adapted from: Day LT, Moran AC, Jackson D, et al. (2019). Survive and Thrive: Transforming care for every small and sick newborn. Chapter 5, Figure 5.1. Geneva, Switzerland.

How do the EN-MINI-PRISM Tools link to the PRISM Series?

The EN-MINI-PRISM tools adaptation extends the reach of the PRISM series for newborn and stillbirth data.[6] The PRISM Framework conceptualizes the broad context affecting RHIS performance designed to identify gaps for sustainable improvement (Figure 4). Three categories of determinants that affect RHIS performance:

- **Behavioral determinants**: The knowledge, skills, attitudes, values, and motivation of the people who collect, analyze, and use health data.
- **Technical determinants**: The RHIS design, data collection forms, processes, systems, and methods.
- **Organizational determinants**: Information culture, structure, resources, roles, and responsibilities of key contributors at each level of the health system.

Figure 4. Performance of Routine Information Systems Management (PRISM) framework



EN-MINI-PRISM Tools Pilot Study in Bangladesh

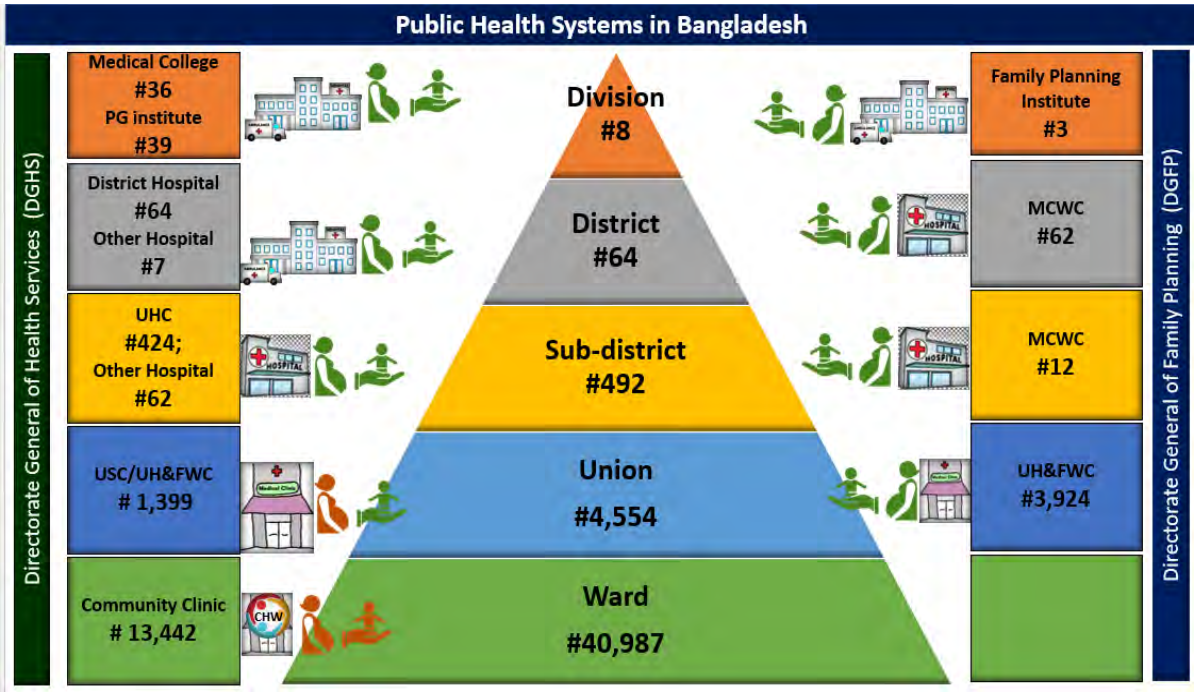
Methods

Location, Sampling, and Respondents

The EN-MINI pilot study was done at all levels of health facilities that provide inpatient services for newborns. This was done to learn as much as possible so that the study could be expanded in the future across the country and beyond.

The healthcare system in Bangladesh can be broken down into five different levels: national, divisional, district, upazila, and ward (Figure 5). Tertiary level referral hospitals are located in medical college hospitals, which are located at the district level. District hospitals (DH) serve as secondary-level referral hospitals. At the sub-district level, the Upazila Health Complexes (UHCs) serve as the primary level of referral hospitals. Union Health and Family Welfare Centers (UHFCW), and community clinics (CC) are the names given to health centers that are located below the sub-district level. The public health system in Bangladesh includes Maternal and Child Welfare Centres in each and every district and subdistrict, in addition to all of these other types of institutions.

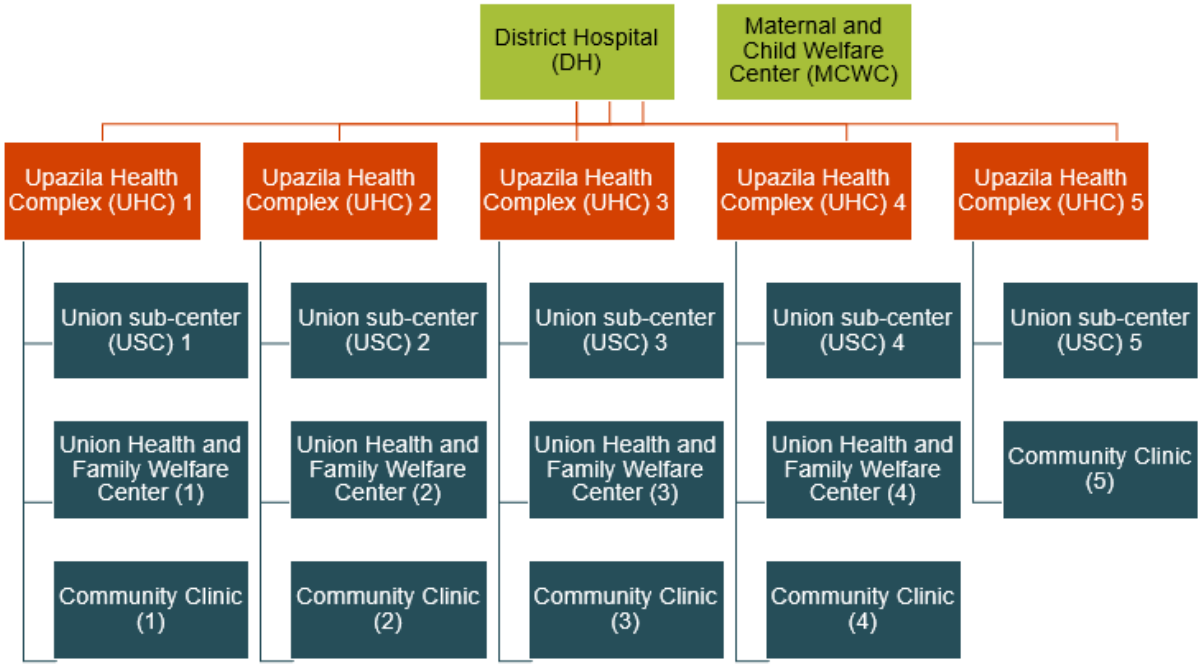
Figure 5. Health system of Bangladesh



Kushtia district in the Khulna division of Bangladesh was selected for this assessment. In total, 21 sites were included: 21 healthcare facilities, including seven associated data offices (six fully assessed and seven partly) within the higher-level health facilities. All respondents were health or data professionals in health facilities and data offices involved in recording, reporting, analyzing, and using maternal, newborn and stillbirth data.

The health facilities were chosen from the sample frame that lists all public government health facilities. We chose one DH, five UHCs, one MCWC, five union sub-centers (USCs), four UH&FWCs, and five CCs. Health facility selection included DHs and UHCs chosen based on the census. In a consultative workshop with MOHFW officials, including the deputy director of the district hospital, the civil surgeon, and upazila health and family planning officers, the health facilities that were selected to be assessed included USC, UH&FWC and CC. USCs were selected as it offers integrated management of childhood illness (IMCI) and newborn sepsis services which are related to the indicators being assessed. The UH&FWC and CC were chosen purposively as they offer delivery services. We decided to count UHC as a district-level facility, as defined by the PRISM assessment tool. Therefore, among the total 21 health facilities assessed, six were at the district level (one DH and five UHC) and 15 were lower-level health facilities (MCWC, USC, UH&FWC and CC) (Figure 6).

Figure 6. Health facilities assessed in the EN-MINI-PRISM Tools Pilot, Bangladesh (n=21 sites)



Training

EN-BIRTH 2 researchers trained data collectors over five days in September 2021 using the EN-MINI-PRISM training materials available on the EN-MINI Tools website.

Data Collection and Management

A team of two data collectors conducted the EN-MINI-PRISM Tools assessment in the 21 sites during October and November 2021. Version 1 of the EN-MINI Tools was used. Data quality was assessed using source and summary report data for April, May, and June 2021. All data were collected on the paper version of the EN-MINI-PRISM tools and then entered digitally using offline, password-protected tablets and uploaded to the General Data Protection Regulation (GDPR)-compliant, secure Open Data Kit (ODK) server (SurveyCTO), using the customized EN-MINI-PRISM Tool forms available on the EN-MINI Tools website.

Analysis

The EN-MINI-PRISM Analysis Tool available on the EN-MINI Tools website was used for analysis following standard PRISM methodology.

RESULTS: USE Newborn Data for Decision Making

Evidence for Existing Data Use

The purpose of routine data is to be used for action for newborns, stillbirths, and their families. Data requires processing and interpretation to be meaningful, as does information used for decision making. This pilot EN-MINI-PRISM Tools assessment found evidence of newborn and stillbirth core indicator use at both the facility level and district data office (Figure 7). Evidence for data use was higher at the district level than the health facility level, including discussion on key performance targets (100% district, 75% facility), analytical data reports (100% district, 33% facility), and data visualization (100% district, 38% facility). Use of data for quality improvement was reported 100% at the district level but only 14% at the health facility level. The full EN-MINI-PRISM Tools assessment findings are shown in the results tables (Appendix 1).

Figure 7. Evidence of existing data use from Bangladesh EN-MINI-PRISM tools pilot (n=21 health facilities and the 6 associated data offices)

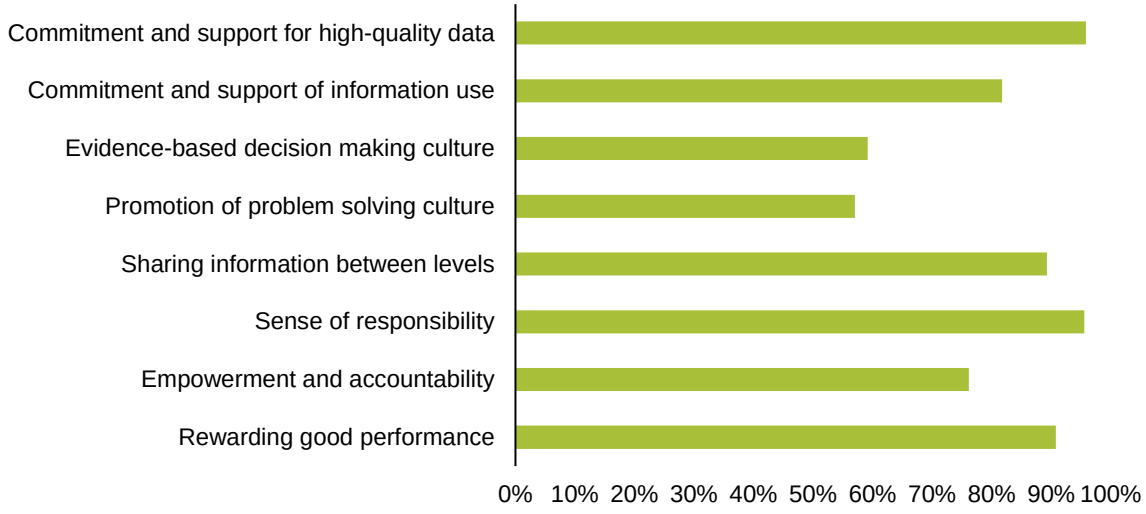
		District	Facility
Organizational Factors	Evidence data analysis taking place	67%	40%
RHIS Processes	Data visualization	100%	38%
	Use of data to produce narrative analytical reports	100%	33%
Use Newborn Data for Decisions	Use information for discussion on key performance targets	100%	75%
	Use information for coverage of services	83%	48%
	Use sex-disaggregated data	33%	19%
	Use information for human resources decisions	67%	24%
	Use information for quality improvement	100%	14%

n=21 facilities, 52 respondents

Opportunities to Enable an Organizational Information Culture

A culture of information is defined as the capacity and control to promote values and beliefs among members of an organization for the collection, analysis, and use of information to achieve an organization's mission and goals. This EN-MINI-PRISM pilot assessment in Bangladesh assessed information culture components from 52 respondents working in the 21 sites. Perceived promotion of information culture components ranged from 57% to 96% (Figure 8). The two lowest-scoring components were promotion of problem-solving culture (57%) and evidence-based decision-making culture (59%). The other six components were reported by >70% of respondents.

Figure 8. Promotion of information culture, Bangladesh EN-MINI-PRISM tools pilot (n=52 respondents, 21 sites)

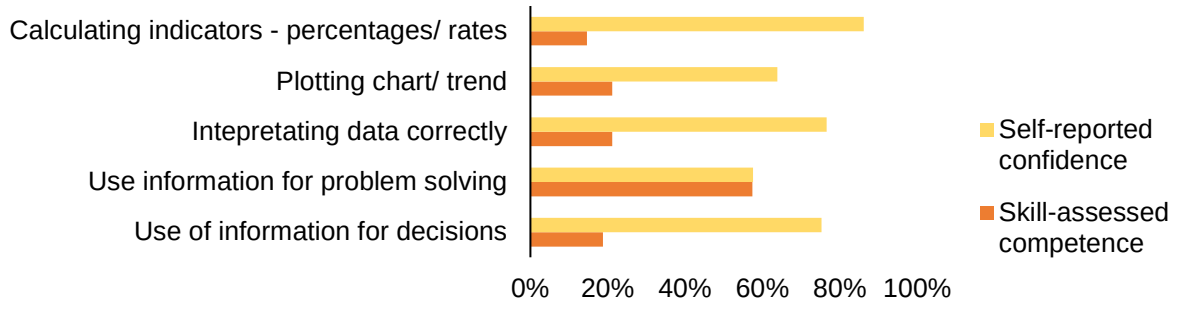


Opportunities to Develop RHIS Skills, Confidence, and Competence

The EN-MINI-PRISM Tools pilot captured 52 individual respondents' perceived confidence and measured competence on RHIS tasks through assessment with examples using newborn and stillbirth data (Figure 8). Confidence and competence matched for use of information for problem solving (57%–58%). Respondents stated they were confident in calculating indicators, plotting charts/trends, interpreting data correctly, and using information for decisions; however, their competence rate was lower when these three criteria were assessed.

The substantial confidence-competence gap for the other RHIS skills is shown in Figure 9.

Figure 9. RHIS task self-reported confidence and skill-assessed competence, Bangladesh EN-MINI-PRISM Tools pilot (n=52 respondents, 21 sites)



RESULTS: IMPROVE Newborn Data Quality

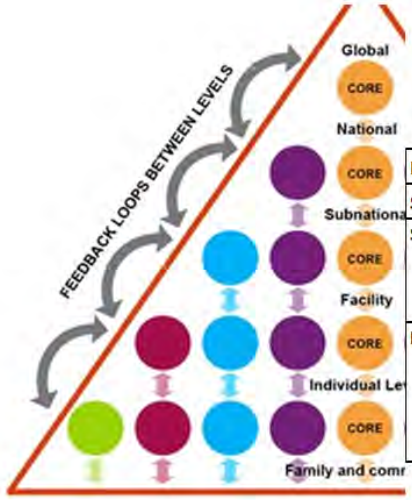
Evidence for Existing Data Quality

Accurate newborn/stillbirth indicator measurement requires both numerator and denominator data elements to be accurately captured. This EN-MINI-PRISM pilot assessed seven priority Sustainable Development Goals (SDG) and ENAP core indicators and one maternal indicator as the tracer for maternal measurement from the EN-BIRTH validation study.

Figure 10 illustrates the Bangladesh pilot EN-MINI-PRISM Tools assessment in 21 sites of data quality at each level of the data pyramid for both denominators needed—total births and live births. At the bottom of the data pyramid, the primary source data from the routine facility register was on average only 56% complete for live births and 63% for total births.

At the health facility level, assessment of three months of reports found: available 94%, complete 94%, and accurately matching the register 98%. (Among 21 sites, the five CCs enter data electronically, so they were excluded from the register-summary form assessment step). Moving up the data pyramid, at the subnational district data office, among reports reviewed from six facilities, 100% expected were available and complete. Subnational, regional, and national-central levels were not assessed during this pilot study.

Figure 10. Data quality domains for newborn and stillbirth denominators, Bangladesh EN-MINI-PRISM Tools pilot (n=21 sites)



				Denominators		Newborn Data Quality Criteria
				Total Birth	Live birth	
National -	**Central**	digital	eRHIS	entered district level		Accuracy - database entry exact match regional summary reports
Subnational -	**Regional**	digital	eRHIS			Accuracy - database entry exact match facility summary reports
Subnational -	**District**	digital	eRHIS	89%	89%	Accuracy - database entry exact match facility reports
				100%	100%	**Completeness** of facility monthly reports
		paper	Summary Form report	100%	100%	**Availability** of facility monthly reports
Facility		paper	Summary Form report	98%	98%	**Accuracy** of monthly report exactly matches register data
				94%	94%	**Completeness** of monthly report submitted
				94%	94%	**Availability** of monthly report
		paper	Register	63%	56%	**Completeness** of register primary source data

Figure 11 shows the numerators and denominators for 10 ten data elements for core indicator measurement. At the facility health facility, the completeness of the source register was less than 65% except for Kangaroo mother care (KMC) at 100%. The monthly reports were available 91%–100% of the time except for KMC. The report completeness was low for KMC (43%) and neonatal sepsis (52%). Report accuracy compared to register was 90% or more, except for bag-mask-ventilation at 66%.

The district office assessment found most reports were 100% available and complete aside from bag-mask-ventilation, neonatal sepsis, and uterotonics to prevent PPH, all at 0%. The database entry matching the summary form was 89% for early initiation of breastfeeding, uterotonics to prevent PPH, and denominators as previously described with all other data elements assessed at 100%.

Figure 11. District and facility level data quality domains for numerators and denominators for newborn/stillbirth/maternal indicator measurement, Bangladesh EN-MINI-PRISM Tools pilot (n=21 sites)

			District office review, n=7 offices			Facility review, n=21			
			Monthly reports, n=all facilities reportring			Monthly reports, n=3 months			Registers, n=3 months
			Availability	Completeness	Accuracy	Availability	Completeness	Accuracy	Completeness
			of facility monthly reports	of facility monthly reports	of database entry exactly matches facility reports	of monthly report	of monthly report	of monthly report from register	of register primary source data
Indicator domain	**Select Core Indicator data element**								
IMPACT	Stillbirth	Numerator	100%	100%	100%	94%	94%	96%	50%
	Institutional neonatal deaths	Numerator	100%	100%	100%	91%	85%	100%	55%
	Low birth weight	Numerator	100%	100%	100%	94%	94%	90%	56%
COVERAGE: Every Newborn	Early initiation Breastfeeding	Numerator	100%	100%	89%	94%	94%	99%	56%
COVERAGE: Small or sick newborns	Bag-mask-ventilation	Numerator	0%	0%	100%	91%	82%	66%	36%
	KMC	Numerator	100%	100%	100%	43%	43%	100%	100%
	Neonatal sepsis	Numerator	0%	0%	100%	100%	52%	100%	0%
Maternal Tracer	Uterotonics prevent PPH	Numerator	0%	0%	89%	94%	94%	98%	56%
Indicator denominators	Total Births	Denominator	100%	100%	89%	94%	94%	98%	63%
	Live births	Denominator	100%	100%	89%	94%	94%	98%	56%

Opportunities to Improve Data Quality

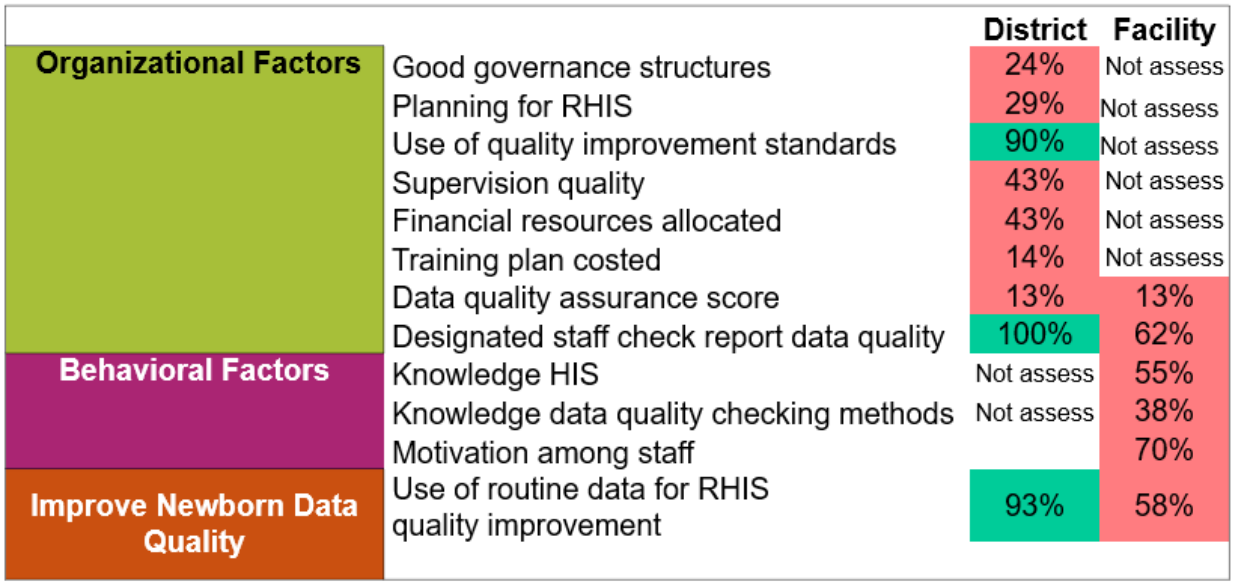
This EN-MINI-PRISM Tools pilot assessment showed that opportunities to improve data quality included organizational factors, behavioral factors, and use of data.

Organizational factors in the district data offices, as shown in Figure 12, were strong for designated staff to check report data quality (100%) and the use of data quality improvement standards (90%). Other factors ranged from 43%–13%. At the health facility level, designated staff was only reported for 62%, and data quality assurance was at 13%. Opportunities to improve the information culture have already been detailed and shown above in Figure 8.

Behavioral factors were assessed at the health facility level, including motivation for RHIS tasks at 70%, knowledge of the RHIS at 55%, and knowledge regarding data quality checking methods at only 38%.

Use of RHIS data for quality improvement activities was reported among 93% of respondents at the district data offices but only 58% in health facilities.

Figure 12. Factors to improve routine data quality from Bangladesh EN-MINI-PRISM tools pilot (n= 21 sites)

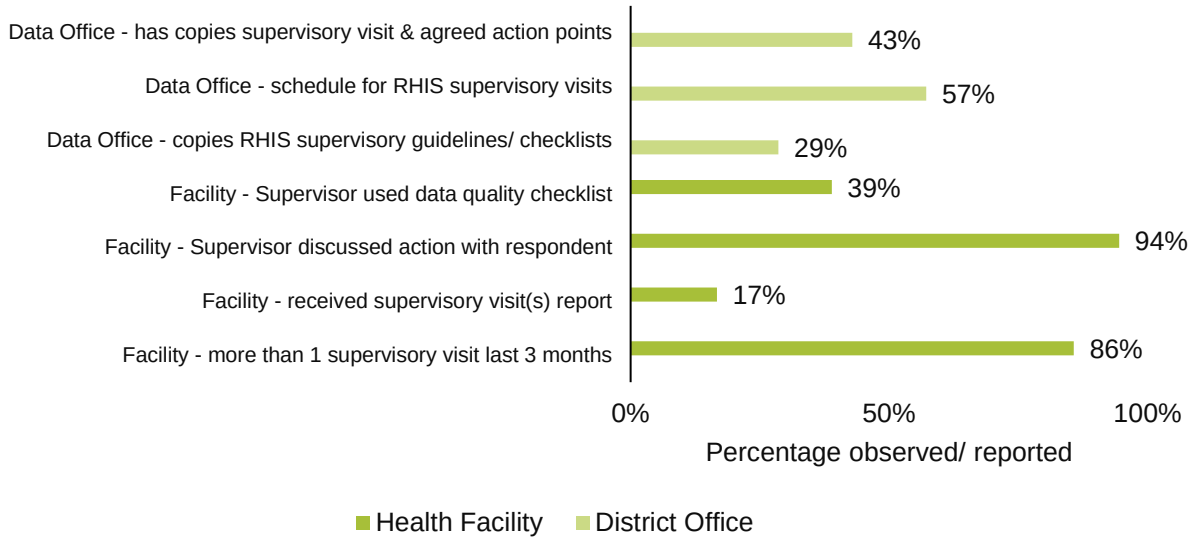


Supervision

This EN-MINI-PRISM Tools pilot showed RHIS supervisory processes were established, and at the health facility level, 86% of health facilities reported a supervisory visit in the preceding three months, and 39% of supervisors had used a data quality checklist (Figure 13). Ninety-four percent of supervisory visits included a discussion regarding action points, but only 17% of facilities had received a report.

At the district data office level, only 43% had copies of the supervisory visit report available. Supervisory guidelines were available at 29% of offices, and visit schedules were available for 57%.

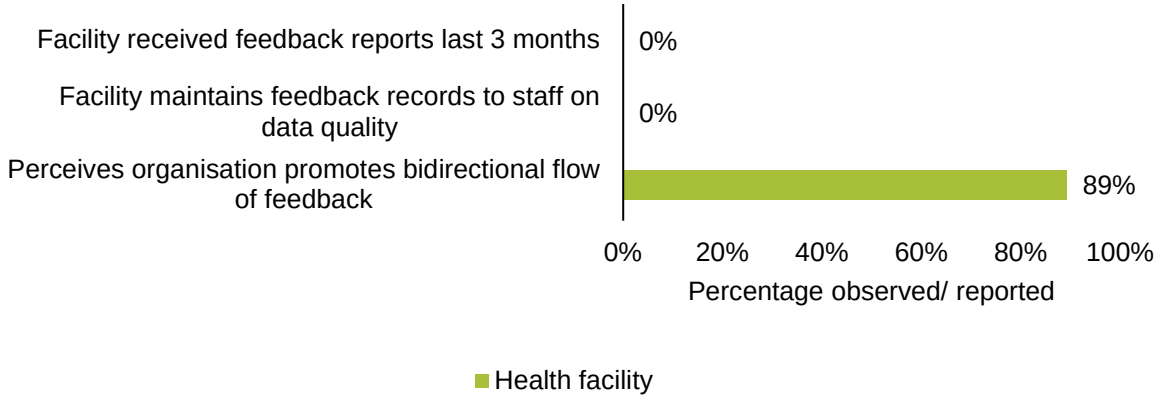
Figure 13. RHIS Supervision health facility and district office – EN-MINI-PRISM pilot, Bangladesh (n=21 sites)



Feedback Loops

Feedback loops between levels were perceived by 89% of facility respondents, yet none had received any feedback report regarding RHIS in the preceding three months. The health facilities assessed did not maintain any feedback records to staff regarding data quality (Figure 14).

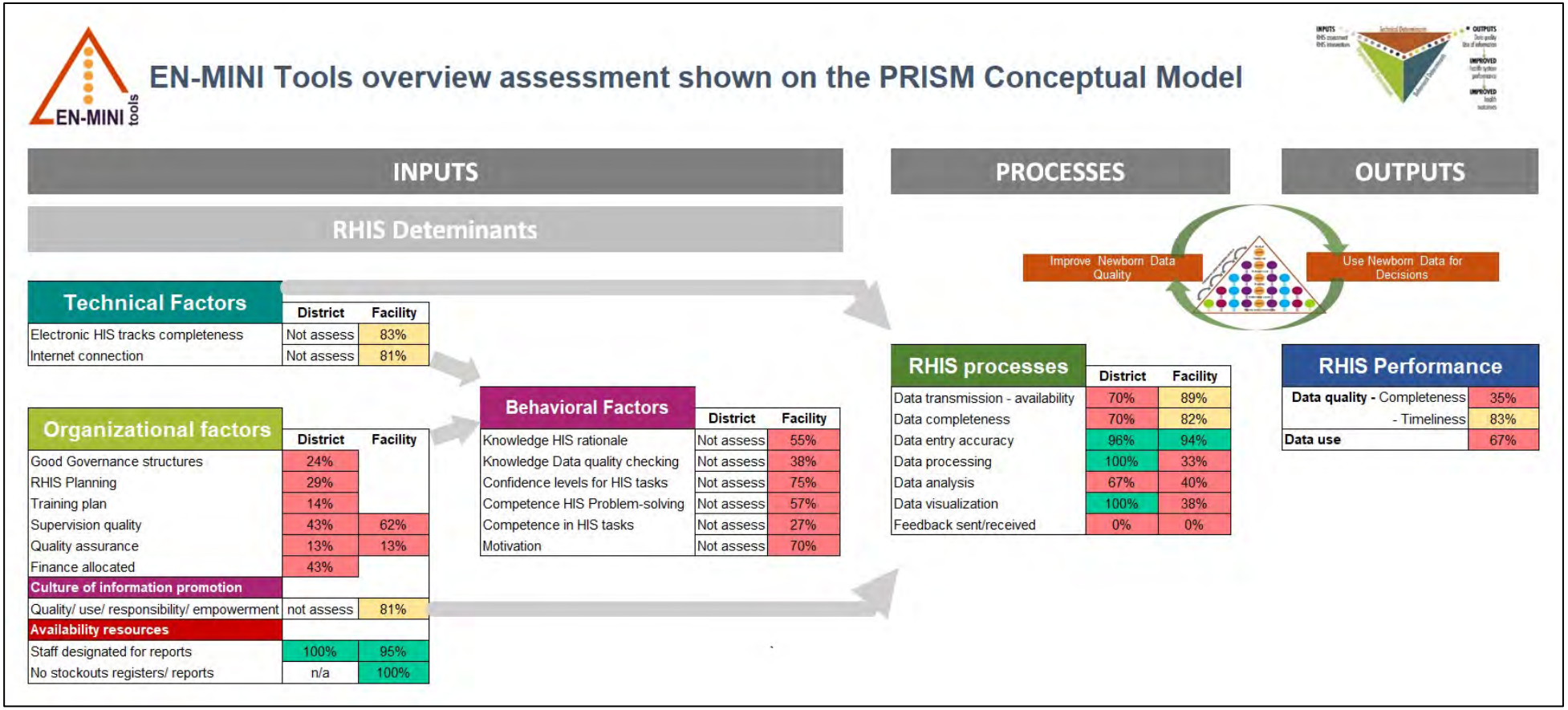
Figure 14. Feedback loops between levels, Bangladesh EN-MINI-PRISM pilot (n=21 sites)



The overview of findings for this Bangladesh pilot study using the PRISM conceptual framework is shown in Figure 15.

Overview of EN-MINI-PRISM Findings of Pilot Study in Kushtia District, Bangladesh

Figure 15. EN-MINI-PRISM overview using PRISM conceptual framework, Bangladesh pilot (n=21 sites)



Technical Factors	District	Facility
Electronic HIS tracks completeness	Not assess	83%
Internet connection	Not assess	81%

Organizational factors	District	Facility
Good Governance structures	24%	
RHIS Planning	29%	
Training plan	14%	
Supervision quality	43%	62%
Quality assurance	13%	13%
Finance allocated	43%	
Culture of information promotion		
Quality/ use/ responsibility/ empowerment	not assess	81%
Availability resources		
Staff designated for reports	100%	95%
No stockouts registers/ reports	n/a	100%

Behavioral Factors	District	Facility
Knowledge HIS rationale	Not assess	55%
Knowledge Data quality checking	Not assess	38%
Confidence levels for HIS tasks	Not assess	75%
Competence HIS Problem-solving	Not assess	57%
Competence in HIS tasks	Not assess	27%
Motivation	Not assess	70%

RHIS processes	District	Facility
Data transmission - availability	70%	89%
Data completeness	70%	82%
Data entry accuracy	96%	94%
Data processing	100%	33%
Data analysis	67%	40%
Data visualization	100%	38%
Feedback sent/received	0%	0%

RHIS Performance	
Data quality - Completeness	35%
- Timeliness	83%
Data use	67%

Conclusion

The EN-MINI-PRISM Tools pilot assessment in the Kushtia District of the Khulna Division in Bangladesh identified strengths and weaknesses in RHIS performance for newborn and stillbirth core indicator data at both district office and health facility levels.

Strengths identified included the availability of resources, accurate data entry, and use of data for visualization at the district data office. Opportunities for improvement were identified across all domains of the PRISM conceptual framework. Among technical factors, there is a need to streamline duplicative processes. Duplicative reporting through parallel systems overburdens frontline health workers and the RHIS in general, compromising data quality. Streamlining reporting will enable health workers to focus on improving the quality of patient care.

Strengthening an information culture and data-enabling environment in the health facility is vital for frontline health workers to feel motivated to capture high-quality data and use this data themselves for quality improvement. Gaps in RHIS organizational factors were identified at both the district data office and health facility level.

Core indicator data are important for subnational, national, and global use, but this EN-MINI-PRISM assessment showed a large gap in data use at the health facility level. RHIS knowledge and skills training are urgently needed for health facility staff collecting newborn and stillbirth data. This includes increasing capacity for health facility staff to generate reports from electronic RHIS in addition to district office use. As RHIS competencies rise, confidence in data use for evidence-based decisions will grow, and enabled by feedback and supervision, data quality will further increase.

Routine data from health facilities are not reaching their full potential for action to enable newborns to survive and thrive. This pilot EN-MINI Tools assessment in Bangladesh highlights an urgent need to focus on the source data collected at the health facility currently in registers. Investing in RHIS systems at higher levels in the data pyramid will not generate accurate data for use if the source data at the bottom of the pyramid remains poor quality.

Improving data quality will strengthen confidence to use data for action at all levels—in health facilities, subnationally, and nationally—to contribute to ensuring every Bangladeshi newborn survives and thrives.

References

1. United Nations Inter-agency Group for Child Mortality Estimation (UNIGME). Report of the United Nations Inter-agency Group for Child Mortality Estimation. Never Forgotten - The situation of stillbirth around the globe2022. https://data.unicef.org/resources/never-forgotten-stillbirth-estimates-report/ (accessed 22 January 2023).
2. United Nations Inter-agency Group for Child Mortality Estimation (UNIGME). Levels & Trends in Child Mortality Report 2022, Estimates developed by the UN Inter-agency Group for Child Mortality Estimation2022. https://data.unicef.org/resources/levels-and-trends-in-child-mortality/ (accessed.
3. World Health Organization. Global Strategy for Women's, Children's and Adolescents' Health, 2016-2030.2015. https://www.who.int/publications/i/item/A71-19 (accessed 6 Oct 2024).
4. World Health Organization, UNICEF. Every Newborn: an action plan to end preventable deaths2014. https://apps.who.int/iris/handle/10665/127938 (accessed 6 Oct 2024).
5. Lawn JE, Cousens S, Zupan J. 4 million neonatal deaths: when? Where? Why? *Lancet* 2005; **365**(9462): 891-900.
6. MEASURE Evaluation. PRISM: Performance of Routine Information System Management Series 2019. https://www.measureevaluation.org/resources/tools/health-information-systems/prism (accessed 26 November 2020).
7. Aqil A, Lippeveld T, Hozumi D. PRISM framework: a paradigm shift for designing, strengthening and evaluating routine health information systems. *Health Policy Plan* 2009; **24**(3): 217-28.
8. Day LT, Ruysen H, Gordeev VS, et al. “Every Newborn-BIRTH” protocol: observational study validating indicators for coverage and quality of maternal and newborn health care in Bangladesh, Nepal and Tanzania. *Journal of Global Health*, 2019. http://jogha.org/documents/issue201901/jogh-09-010902.htm (accessed 18 August 2022).
9. Day LT, Rahman QS, Rahman AE, et al. Assessment of the validity of the measurement of newborn and maternal health-care coverage in hospitals (EN-BIRTH): an observational study. *The Lancet Global Health* 2021; **9**(3): E267-79.
10. Every Newborn - Birth Indicators Research Tracking in Hospitals (EN-BIRTH) Study Group. Every Newborn BIRTH multi-country validation study; informing measurement of coverage and quality of maternal and newborn care - Supplement2021. https://bmcpregnancychildbirth.biomedcentral.com/articles/supplements/volume-21-supplement-1 (accessed 2 May 2021).

Appendix 1: Full EN-MINI-PRISM Results Tables

The full cross-cutting EN-MINI-PRISM Bangladesh pilot assessment results are presented in the following tables arranged by themes:

1. Data quality indicators
2. Use of information indicators
3. Data management indicators
4. Technical factors
5. Organization factors
6. Gender indicators

For this pilot study, data were collected only at district and facility levels. Dummy tables for central and regional levels are shown for completeness to illustrate the potential for the EN-MINI-PRISM Tool assessment.

Tables of Results

1. RHIS performance: Data Quality Indicators

1A. Data Quality Indicators—Central Level

Section 1A Tables: Data Quality Indicators—Central Level

A. RHIS Performance: Data Quality Indicators- Central Level

Table 1A.1 Completeness of reported data—Central Level

Completeness of reported data

Indicator: % of expected monthly facility reports received at the central level (target=95%)

$$\frac{\text{Total \# of facility reports received at the central level}}{\text{Total \# of expected facility reports at the central level}} \times 100$$

Data Source—Module IIa: RHIS Performance Diagnostic Tool (Central Level)				
Health facilities (all types)	**Numerator**	**Denominator**	**%**	**Target**
mm/yyyy	*	*	*	95%
mm/yyyy	*	*	*	95%
mm/yyyy	*	*	*	95%
All months	*	*	*	95%

* not collected during this EN-MINI-PRISM Tools pilot assessment

Table 1A.2 Completeness of reported data—Central Level

Reasons for default of report completeness

Data Source—Module II: RHIS Performance Diagnostic Tool		
Variables	**#**	**%**
Storage or archiving problems	*	*
Staffing issues	*	*
Absence of reporting forms	*	*
Transportation issues	*	*
Internet connectivity issues	*	*
Presence of other vertical reporting requirements	*	*
Other (specify)	*	*

* not collected during this EN-MINI-PRISM Tools pilot assessment

Table 1A.3 Timeliness of facility reporting—Central Level

Timeliness of facility reporting

Indicator: % of facilities submitting monthly reports on time to the aggregation site (target=100%)

$$\frac{\text{Total \# of facilities that submitted reports on time to the aggregation site}}{\text{Total \# of expected facility reports at the aggregation site}} \times 100$$

Data Source—Module IIa: RHIS Performance Diagnostic Tool			
Period for health facilities (all types)	**Numerator**	**Denominator**	**Value**
mm/yyyy	*	*	*
mm/yyyy	*	*	*
mm/yyyy	*	*	*
All months	*	*	*

* not collected during this EN-MINI-PRISM Tools pilot assessment

Table 1A.4 Accuracy of entered data—Central Level

Accuracy of entered data (only for manual compilation)

Indicator: % of accuracy between regional compiled data and the national data reported in the national database for selected indicators (target=100%)

$$\frac{\text{Sum of all region verification factor (VF) deviations}}{\text{Total \# of assessed site regions per selected indicator}} \times 100$$

The central global accuracy (CGA) = 100—Average central VF deviation

Data Source—Module IIa: RHIS Performance Diagnostic Tool					
Indicator	**Period**	**Numerator**	**Denominator**	**Value**	**CGA**
Total births	**mm/yyyy**	*	*	*	*
	mm/yyyy	*	*	*	*
	mm/yyyy	*	*	*	*
	All months	*	*	*	*
Live births	**mm/yyyy**	*	*	*	*
	mm/yyyy	*	*	*	*
	mm/yyyy	*	*	*	*
	All months	*	*	*	*
Stillbirths	**mm/yyyy**	*	*	*	*
	mm/yyyy	*	*	*	*
	mm/yyyy	*	*	*	*
	All months	*	*	*	*
Low birthweight	**mm/yyyy**	*	*	*	*
	mm/yyyy	*	*	*	*
	mm/yyyy	*	*	*	*
	All months	*	*	*	*
Early initiation of breastfeeding	**mm/yyyy**	*	*	*	*
	mm/yyyy	*	*	*	*
	mm/yyyy	*	*	*	*
	All months	*	*	*	*
Bag-mask ventilation	**mm/yyyy**	*	*	*	*
	mm/yyyy	*	*	*	*
	mm/yyyy	*	*	*	*
	All months	*	*	*	*
Uterotonics for postpartum hemorrhage	**mm/yyyy**	*	*	*	*
	mm/yyyy	*	*	*	*
	mm/yyyy	*	*	*	*
	All months	*	*	*	*
KMC	**mm/yyyy**	*	*	*	*
	mm/yyyy	*	*	*	*
	mm/yyyy	*	*	*	*
	All months	*	*	*	*
Institutional neonatal deaths	**mm/yyyy**	*	*	*	*
	mm/yyyy	*	*	*	*
	mm/yyyy	*	*	*	*
	All months	*	*	*	*
Neonatal sepsis	**mm/yyyy**	*	*	*	*
	mm/yyyy	*	*	*	*
	mm/yyyy	*	*	*	*
	All months	*	*	*	*

* not collected during this EN-MINI-PRISM Tools pilot assessment

(table is continued from previous page)

Extent to which regional reported data and data recorded for selected indicators in the database are meeting the set criteria for data accuracy													
		A						B					
		% <90%		90%<=%<110%		%>=110%		% <80%		80%<=%<120%		%>=120%	
Indicator	Period	#	%	#	%	#	%	#	%	#	%	#	%
Total births	mm/yyyy	*	*	*	*	*	*	*	*	*	*	*	*
	mm/yyyy	*	*	*	*	*	*	*	*	*	*	*	*
	mm/yyyy	*	*	*	*	*	*	*	*	*	*	*	*
	All months		*		*		*		*		*		*
Live births	mm/yyyy	*	*	*	*	*	*	*	*	*	*	*	*
	mm/yyyy	*	*	*	*	*	*	*	*	*	*	*	*
	mm/yyyy	*	*	*	*	*	*	*	*	*	*	*	*
	All months		*		*		*		*		*		*
Stillbirths	mm/yyyy	*	*	*	*	*	*	*	*	*	*	*	*
	mm/yyyy	*	*	*	*	*	*	*	*	*	*	*	*
	mm/yyyy	*	*	*	*	*	*	*	*	*	*	*	*
	All months		*		*		*		*		*		*
Low birthweight	mm/yyyy	*	*	*	*	*	*	*	*	*	*	*	*
	mm/yyyy	*	*	*	*	*	*	*	*	*	*	*	*
	mm/yyyy	*	*	*	*	*	*	*	*	*	*	*	*
	All months		*		*		*		*		*		*
Early initiation of breastfeeding	mm/yyyy	*	*	*	*	*	*	*	*	*	*	*	*
	mm/yyyy	*	*	*	*	*	*	*	*	*	*	*	*
	mm/yyyy	*	*	*	*	*	*	*	*	*	*	*	*
	All months		*		*		*		*		*		*
Bag-mask ventilation	mm/yyyy	*	*	*	*	*	*	*	*	*	*	*	*
	mm/yyyy	*	*	*	*	*	*	*	*	*	*	*	*
	mm/yyyy	*	*	*	*	*	*	*	*	*	*	*	*
	All months		*		*		*		*		*		*
Uterotonics for postpartum hemorrhage	mm/yyyy	*	*	*	*	*	*	*	*	*	*	*	*
	mm/yyyy	*	*	*	*	*	*	*	*	*	*	*	*
	mm/yyyy	*	*	*	*	*	*	*	*	*	*	*	*
	All months		*		*		*		*		*		*
KMC	mm/yyyy	*	*	*	*	*	*	*	*	*	*	*	*
	mm/yyyy	*	*	*	*	*	*	*	*	*	*	*	*
	mm/yyyy	*	*	*	*	*	*	*	*	*	*	*	*
	All months		*		*		*		*		*		*
Institutional neonatal deaths	mm/yyyy	*	*	*	*	*	*	*	*	*	*	*	*
	mm/yyyy	*	*	*	*	*	*	*	*	*	*	*	*
	mm/yyyy	*	*	*	*	*	*	*	*	*	*	*	*
	All months		*		*		*		*		*		*
Neonatal sepsis	mm/yyyy	*	*	*	*	*	*	*	*	*	*	*	*
	mm/yyyy	*	*	*	*	*	*	*	*	*	*	*	*
	mm/yyyy	*	*	*	*	*	*	*	*	*	*	*	*
	All months		*		*		*		*		*		*

Table 1A.5 Reasons for observed discrepancies—Central Level

Reasons for observed discrepancies
Indicator: Top three reasons that were given as possible reasons for observed discrepancy during the assessment
In this table, DQ026 corresponds to the first month, DQ027 to the second month, and DQ028 to the third month

Data Source—Module IIa: RHIS Performance Diagnostic Tool					
Indicator	**Data entry errors**	**Arithmetic errors**	**Information from submitted reports incorrectly compiled**	**Monthly reports unavailable**	**Other reason(s)**
Total births	*	*	*	*	*
Live births	*	*	*	*	*
Stillbirths	*	*	*	*	*
Low birthweight	*	*	*	*	*
Early initiation of breastfeeding	*	*	*	*	*
Bag-mask ventilation	*	*	*	*	*
Uterotonics for postpartum hemorrhage	*	*	*	*	*
KMC	*	*	*	*	*
Institutional neonatal deaths	*	*	*	*	*
Neonatal sepsis	*	*	*	*	*

* not collected during this EN-MINI-PRISMEN-MINI-PRISM Tools pilot assessment

1B. Data Quality Indicators—Regional Level

Section 1B Tables: Data Quality Indicators—Regional Level

Table 1B.1 Completeness of reported data—Regional Level

Completeness of facility reporting

Indicator: % of expected monthly reports received at the region level (target=95%)

$$\frac{\text{Total \# of facility reports received at the region level}}{\text{Total \# of expected facility reports at the region level}} \times 100$$

Data Source—Module IIa: RHIS Performance Diagnostic Tool (Region Level)				
Health facilities (all types)	**Numerator**	**Denominator**	**%**	**Target**
4/2021	*	*	*	*
5/2021	*	*	*	*
6/2021	*	*	*	*
All months	*	*	*	*

* not collected during this EN-MINI-PRISM Tools pilot assessment

Table 1B.2 Completeness of reported data—Regional Level

Reasons for default of report completeness

Data Source—Module II: RHIS Performance Diagnostic Tool (Region Level)		
Variables	**#**	**%**
Storage or archiving problems	*	*
Staffing issues	*	*
Absence of reporting forms	*	*
Transportation issues	*	*
Internet connectivity issues	*	*
Presence of other vertical reporting requirements	*	*
Other (specify)	*	*

* not collected during this EN-MINI-PRISM Tools pilot assessment

Table 1B.3 Timeliness of facility reporting—Regional Level

Timeliness of facility reporting

Indicator: % of facilities submitting monthly reports on time to the aggregation site (target=100%)

$$\frac{\text{Total \# of facilities that submitted reports on time to the aggregation site}}{\text{Total \# of expected facility reports at the aggregation site}} \times 100$$

Data Source—Module IIa: RHIS Performance Diagnostic Tool (Region Level)			
Period for health facilities (all types)	**Numerator**	**Denominator**	**Value**
mm/yyyy	*	*	*
mm/yyyy	*	*	*
mm/yyyy	*	*	*
All months	*	*	*

* not collected during this EN-MINI-PRISM Tools pilot assessment

Table 1B.4 Accuracy of entered data—Regional Level

Accuracy of entered data (only for manual compilation)

Indicator: % of accuracy between data entered in the region (or national) database and the facility monthly report for selected indicators (target=100%)

$$\frac{\text{Sum of all region verification factor (VF) deviations}}{\text{Total \# of assessed site regions per selected indicator}} \times 100$$

Data Source—Module iia: RHIS Performance Diagnostic Tool (Region Level)					Region accuracy
Indicator	**Period**	**Numerator**	**Denominator**	**Value**	**CGA**
Total births	**Mm/yyyy**		*	*	*
	Mm/yyyy	*	*	*	*
	Mm/yyyy	*	*	*	*
	All months	*	*	*	*
Live births	**Mm/yyyy**	*	*	*	*
	Mm/yyyy	*	*	*	*
	Mm/yyyy	*	*	*	*
	All months	*	*	*	*
Stillbirths	**Mm/yyyy**	*	*	*	*
	Mm/yyyy	*	*	*	*
	Mm/yyyy	*	*	*	*
	All months	*	*	*	*
Low birthweight	**Mm/yyyy**	*	*	*	*
	Mm/yyyy	*	*	*	*
	Mm/yyyy	*	*	*	*
	All months	*	*	*	*
Early initiation of breastfeeding	**Mm/yyyy**	*	*	*	*
	Mm/yyyy	*	*	*	*
	Mm/yyyy	*	*	*	*
	All months	*	*	*	*
Bag-mask ventilation	**Mm/yyyy**	*	*	*	*
	Mm/yyyy	*	*	*	*
	Mm/yyyy	*	*	*	*
	All months	*	*	*	*
Uterotonics for postpartum hemorrhage	**Mm/yyyy**	*	*	*	*
	Mm/yyyy	*	*	*	*
	Mm/yyyy	*	*	*	*
	All months	*	*	*	*
KMC	**Mm/yyyy**	*	*	*	*
	Mm/yyyy	*	*	*	*
	Mm/yyyy	*	*	*	*
	All months	*	*	*	*
Institutional neonatal deaths	**Mm/yyyy**	*	*	*	*
	Mm/yyyy	*	*	*	*
	Mm/yyyy	*	*	*	*
	All months	*	*	*	*
Neonatal sepsis	**Mm/yyyy**	*	*	*	*
	Mm/yyyy	*	*	*	*
	Mm/yyyy	*	*	*	*
	All months	*	*	*	*

* not collected during this EN-MINI-PRISM Tools pilot assessment

(Table continues on next page)

Indicator: % of regions where districts data reported in monthly reports and the data recorded for selected indicators in the database are meeting the set criteria for data accuracy													
		A						B					
		% <90%		90%<=%<110%		%>=110%		% <80%		80%<=%<120%		%>=120%	
Indicator	Period	#	%	#	%	#	%	#	%	#	%	#	%
Total births	mm/yyyy	*	*	*	*	*	*	*	*	*	*	*	*
	mm/yyyy	*	*	*	*	*	*	*	*	*	*	*	*
	mm/yyyy	*	*	*	*	*	*	*	*	*	*	*	*
	All months		*		*		*		*		*		*
Live births	mm/yyyy	*	*	*	*	*	*	*	*	*	*	*	*
	mm/yyyy	*	*	*	*	*	*	*	*	*	*	*	*
	mm/yyyy	*	*	*	*	*	*	*	*	*	*	*	*
	All months		*		*		*		*		*		*
Stillbirths	mm/yyyy	*	*	*	*	*	*	*	*	*	*	*	*
	mm/yyyy	*	*	*	*	*	*	*	*	*	*	*	*
	mm/yyyy	*	*	*	*	*	*	*	*	*	*	*	*
	All months		*		*		*		*		*		*
Low birthweight	mm/yyyy	*	*	*	*	*	*	*	*	*	*	*	*
	mm/yyyy	*	*	*	*	*	*	*	*	*	*	*	*
	mm/yyyy	*	*	*	*	*	*	*	*	*	*	*	*
	All months		*		*		*		*		*		*
Early initiation of breastfeeding	mm/yyyy	*	*	*	*	*	*	*	*	*	*	*	*
	mm/yyyy	*	*	*	*	*	*	*	*	*	*	*	*
	mm/yyyy	*	*	*	*	*	*	*	*	*	*	*	*
	All months		*		*		*		*		*		*
Bag-mask ventilation	mm/yyyy	*	*	*	*	*	*	*	*	*	*	*	*
	mm/yyyy	*	*	*	*	*	*	*	*	*	*	*	*
	mm/yyyy	*	*	*	*	*	*	*	*	*	*	*	*
	All months		*		*		*		*		*		*
Uterotonics for postpartum hemorrhage	mm/yyyy	*	*	*	*	*	*	*	*	*	*	*	*
	mm/yyyy	*	*	*	*	*	*	*	*	*	*	*	*
	mm/yyyy	*	*	*	*	*	*	*	*	*	*	*	*
	All months		*		*		*		*		*		*
KMC	mm/yyyy	*	*	*	*	*	*	*	*	*	*	*	*
	mm/yyyy	*	*	*	*	*	*	*	*	*	*	*	*
	mm/yyyy	*	*	*	*	*	*	*	*	*	*	*	*
	All months		*		*		*		*		*		*
Institutional neonatal deaths	mm/yyyy	*	*	*	*	*	*	*	*	*	*	*	*
	mm/yyyy	*	*	*	*	*	*	*	*	*	*	*	*
	mm/yyyy	*	*	*	*	*	*	*	*	*	*	*	*
	All months		*		*		*		*		*		*
Neonatal sepsis	mm/yyyy	*	*	*	*	*	*	*	*	*	*	*	*
	mm/yyyy	*	*	*	*	*	*	*	*	*	*	*	*
	mm/yyyy	*	*	*	*	*	*	*	*	*	*	*	*
	All months		*		*		*		*		*		*

Table 1B.5 Reasons for observed discrepancies—Regional Level

Reasons for observed discrepancies

Indicator: Top three reasons that were given as possible reasons for observed discrepancy during the assessment

Data Source—Module IIa: RHIS Performance Diagnostic Tool (Region Level)					
Indicator	**Data entry errors**	**Arithmetic errors**	**Information from submitted reports incorrectly compiled**	**Monthly reports unavailable**	**Other reason(s)**
Total births	*	*	*	*	*
Live births	*	*	*	*	*
Stillbirths	*	*	*	*	*
Low birthweight	*	*	*	*	*
Early initiation of breastfeeding	*	*	*	*	*
Bag-mask ventilation	*	*	*	*	*
Uterotonics for postpartum hemorrhage	*	*	*	*	*
KMC	*	*	*	*	*
Institutional neonatal deaths	*	*	*	*	*
Neonatal sepsis	*	*	*	*	*

* not collected during this EN-MINI-PRISM Tools pilot assessment

C. RHIS Performance: Data Quality Indicators- District Level

I. RHIS Performance: Data Quality Indicators

Completeness of reported data

Indicator: % of monthly reports completely filled with data for selected indicators (i.e., reports contain the data relevant to the selected indicators) (target=100%)

$$\frac{\text{Total \# of facilities that submitted a complete report on the selected indicators}}{\text{Total \# of facilities expected to report on the selected indicators}} \times 100$$

At this level, the denominator is all those facilities expected to report on the selected data

Scenario 1

This scenario is valid when facilities are randomly sampled in a sampled district.

1C. Data Quality Indicators—District Level

Section 1C Tables: Data Quality Indicators—District Level

Table 1C.1 Completeness of reported data—District Level

Data Source—Module iia: RHIS Performance Diagnostic Tool (District Level)				
Indicator	**Period**	**Numerator**	**Denominator**	**Value**
Total births	4/2021	213	213	100%
	5/2021	213	213	100%
	6/2021	213	213	100%
	All months	639	639	100%
Live births	4/2021	213	213	100%
	5/2021	213	213	100%
	6/2021	213	213	100%
	All months	639	639	100%
Stillbirths	4/2021	213	213	100%
	5/2021	213	213	100%
	6/2021	213	213	100%
	All months	639	639	100%
Low birthweight	4/2021	37	37	100%
	5/2021	37	37	100%
	6/2021	37	37	100%
	All months	111	111	100%
Early initiation of breastfeeding	4/2021	213	213	100%
	5/2021	213	213	100%
	6/2021	213	213	100%
	All months	639	639	100%
Bag-mask ventilation	4/2021	37	37	100%
	5/2021	37	37	100%
	6/2021	37	37	100%
	All months	111	111	100%

Uterotonics for postpartum hemorrhage	4/2021	37	37	100%
	5/2021	37	37	100%
	6/2021	37	37	100%
	All months	111	111	100%
KMC	4/2021	37	37	100%
	5/2021	37	37	100%
	6/2021	37	37	100%
	All months	111	111	100%
Institutional neonatal deaths	4/2021	37	37	100%
	5/2021	37	37	100%
	6/2021	37	37	100%
	All months	111	111	100%
Neonatal sepsis	4/2021	4	77	5%
	5/2021	4	77	5%
	6/2021	4	77	5%
	All months	12	231	5%

Table 1C.2 Reason for missing data—District Level

Reasons for missing data

Data Source—Module II: RHIS Performance Diagnostic Tool (District Level)		
Variables	**#**	**%**
Staffing issue(s)	0	0%
Not understanding the data element(s)	0	0%
Presence of other vertical reporting requirements	0	0%
Other	5	100%

Table 1C.3 Completeness of facility reporting—District Level—reports received

Completeness of facility reporting

Indicator: % of expected monthly reports received at the district level (target=95%)

$$\frac{\text{Total \# of facility reports received at the district level}}{\text{Total \# of expected facility reports at the district level}} \times 100$$

Data Source—Module IIa: RHIS Performance Diagnostic Tool (District Level)				
Health Facilities (all types)	**Numerator**	**Denominator**	**%**	**Target**
4/2021	253	253	100%	95%
5/2021	253	253	100%	95%
6/2021	253	253	100%	95%
All months	759	759	100%	95%

Table 1C.4 Completeness of facility form reporting—District Level—reasons for default

Completeness of facility form reporting
Reasons for default of report completeness

Data Source—Module II: RHIS Performance Diagnostic Tool (District Level)		
Variables	**#**	**%**
Storage or archiving problems	0	
Staffing issues	0	
Absence of reporting forms	0	
Transportation issues	0	
Internet connectivity issues	0	
Presence of other vertical reporting requirements	0	
Other (specify)	0	

Table 1C.5 Completeness of facility form reporting—District Level % of expected monthly reports available

Completeness of facility form reporting

Indicator: % of expected monthly reports of selected indicators that are available at the district level (target=95%)

$$\frac{\text{Total \# of facility reports on the selected indicators received at the district level}}{\text{Total \# of expected facility reports on the selected indicators at the district level}} \times 100$$

Data Source—Module IIa: RHIS Performance Diagnostic Tool (District Level)				
Indicator	**Period**	**Numerator**	**Denominator**	**Value**
Total births	4/2021	213	213	100%
	5/2021	213	213	100%
	6/2021	213	213	100%
	All months	639	639	100%
Live births	4/2021	213	213	100%
	5/2021	213	213	100%
	6/2021	213	213	100%
	All months	639	639	100%
Stillbirths	4/2021	213	213	100%
	5/2021	213	213	100%
	6/2021	213	213	100%
	All months	639	639	100%
Low birthweight	4/2021	37	37	100%
	5/2021	37	37	100%
	6/2021	37	37	100%
	All months	111	111	100%
Early initiation of breastfeeding	4/2021	213	213	100%
	5/2021	213	213	100%
	6/2021	213	213	100%
	All months	639	639	100%
Bag-mask ventilation	4/2021	37	37	100%
	5/2021	37	37	100%
	6/2021	37	37	100%
	All months	111	111	100%
Uterotonics for postpartum hemorrhage	4/2021	37	37	100%
	5/2021	37	37	100%
	6/2021	37	37	100%
	All months	111	111	100%
KMC	4/2021	37	37	100%
	5/2021	37	37	100%
	6/2021	37	37	100%
	All months	111	111	100%
Institutional neonatal deaths	4/2021	37	37	100%
	5/2021	37	37	100%
	6/2021	37	37	100%
	All months	111	111	100%
Neonatal sepsis	4/2021	77	77	100%
	5/2021	77	77	100%
	6/2021	77	77	100%
	All months	231	231	100%

Table 1C.6 Timeliness of facility reporting—District Level—% of facilities submitting reports on time

Timeliness of facility reporting

Indicator: % of facilities submitting monthly reports on time to the aggregation site (target=100%)

$$\frac{\text{Total \# of facilities that submitted reports on time to the aggregation site}}{\text{Total \# of expected facility reports at the aggregation site}} \times 100$$

Data Source—Module IIa: RHIS Performance Diagnostic Tool (District Level)			
Health facilities (all types)	**Numerator**	**Denominator**	**Value**
4/2021	210	253	83%
5/2021	210	253	83%
6/2021	210	253	83%
All months	630	759	83%

Table 1C.7 Accuracy of entered data—District Level

Indicator: % of accuracy between data entered in the district (or national) database and the facility monthly report for selected indicators (target=100%)

$$\frac{\text{Sum of all district VF deviations}}{\text{Total \# of assessed site districts per selected indicator}} \times 100$$

The district global accuracy = 100—Average district VF deviation

Not relevant for systems using DHIS2

Data Source—Module IIa: RHIS Performance Diagnostic Tool (District Level)					District global accuracy
Indicator	**Period**	**Numerator**	**Denominator**	**Value**	**CGA**
Total births	4/2021	0.97	6	16%	84%
	5/2021	0.94	6	16%	84%
	6/2021	0.00	6	0%	100%
	All months	1.91	18	11%	89%
Live births	4/2021	0.97	6	16%	84%
	5/2021	0.94	6	16%	84%
	6/2021	0.00	6	0%	100%
	All months	1.91	18	11%	89%
Stillbirths	4/2021	0.00	6	0%	100%
	5/2021	0.00	6	0%	100%
	6/2021	0.00	6	0%	100%
	All months	0.00	18	0%	100%
Low birthweight	4/2021	0.00	6	0%	100%
	5/2021	0.00	6	0%	100%
	6/2021	0.00	6	0%	100%
	All months	0.00	18	0%	100%
Early initiation of breastfeeding	4/2021	0.97	6	16%	84%
	5/2021	0.94	6	16%	84%
	6/2021	0.00	6	0%	100%
	All months	1.91	18	11%	89%
Bag-mask ventilation	4/2021	0.00	6	0%	100%
	5/2021	0.00	6	0%	100%
	6/2021	0.00	6	0%	100%
	All months	0.00	18	0%	100%
Uterotonics for postpartum hemorrhage	4/2021	0.97	6	16%	84%
	5/2021	0.94	6	16%	84%
	6/2021	0.00	6	0%	100%
	All months	1.91	18	11%	89%
KMC	4/2021	0.00	6	0%	100%
	5/2021	0.00	6	0%	100%
	6/2021	0.00	6	0%	100%
	All months	0.00	18	0%	100%
Institutional neonatal deaths	4/2021	0.00	6	0%	100%
	5/2021	0.00	6	0%	100%
	6/2021	0.00	6	0%	100%
	All months	0.00	18	0%	100%
Neonatal sepsis	4/2021	0.00	6	0%	100%
	5/2021	0.00	6	0%	100%
	6/2021	0.00	6	0%	100%
	All months	0.00	18	0%	100%

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Indicator: % of districts where data reported in monthly reports and data recorded in monthly reports and the data recorded for selected indicators in the database are meeting the set criteria for accuracy													
		A						B					
		% <90%		90%<=%<110%		%>=110%		% <80%		80%<=%<120%		%>=120%	
Indicator	**Period**	#	%	#	%	#	%	#	%	#	%	#	%
Total births	4/2021	1	17%	5	83%	0	0%	1	17%	5	83%	0	0%
	5/2021	1	17%	4	67%	0	0%	1	17%	4	67%	0	0%
	6/2021	0	0%	6	100%	0	0%	0	0%	6	100%	0	0%
	All months		11%		83%		0%		11%		83%		0%
Live births	4/2021	1	17%	5	83%	0	0%	1	17%	5	83%	0	0%
	5/2021	1	17%	4	67%	0	0%	1	17%	4	67%	0	0%
	6/2021	0	0%	6	100%	0	0%	0	0%	6	100%	0	0%
	All months		11%		83%		0%		11%		83%		0%
Stillbirths	4/2021	0	0%	5	83%	0	0%	0	0%	5	83%	0	0%
	5/2021	0	0%	4	67%	0	0%	0	0%	4	67%	0	0%
	6/2021	0	0%	6	100%	0	0%	0	0%	6	100%	0	0%
	All months		0%		83%		0%		0%		83%		0%
Low birthweight	4/2021	0	0%	5	83%	0	0%	0	0%	0	0%	0	0%
	5/2021	0	0%	4	67%	0	0%	0	0%	0	0%	0	0%
	6/2021	0	0%	6	100%	0	0%	0	0%	0	0%	0	0%
	All months		0%		83%		0%		0%		0%		0%
Early initiation of breastfeeding	4/2021	1	17%	5	83%	0	0%	1	17%	5	83%	0	0%
	5/2021	1	17%	4	67%	0	0%	1	17%	4	67%	0	0%
	6/2021	0	0%	6	100%	0	0%	0	0%	6	100%	0	0%
	All months		11%		83%		0%		11%		83%		0%
Bag-mask ventilation	4/2021	0	0%	5	83%	0	0%	0	0%	5	83%	0	0%
	5/2021	0	0%	4	67%	0	0%	0	0%	4	67%	0	0%
	6/2021	0	0%	6	100%	0	0%	0	0%	6	100%	0	0%
	All months		0%		83%		0%		0%		83%		0%
Uterotonics for postpartum hemorrhage	4/2021	1	17%	5	83%	0	0%	1	17%	1	17%	1	17%
	5/2021	1	17%	4	67%	0	0%	1	17%	1	17%	1	17%
	6/2021	0	0%	6	100%	0	0%	0	0%	0	0%	0	0%
	All months		11%		83%		0%		11%		11%		11%
KMC	4/2021	0	0%	6	100%	0	0%	0	0%	0	0%	0	0%
	5/2021	0	0%	5	83%	0	0%	0	0%	0	0%	0	0%
	6/2021	0	0%	6	100%	0	0%	0	0%	0	0%	0	0%
	All months		0%		94%		0%		0%		0%		0%
Institutional neonatal deaths	4/2021	0	0%	5	83%	0	0%	0	0%	0	0%	0	0%
	5/2021	0	0%	3	50%	0	0%	0	0%	0	0%	0	0%
	6/2021	0	0%	5	83%	0	0%	0	0%	0	0%	0	0%
	All months		0%		72%		0%		0%		0%		0%
Neonatal sepsis	4/2021	0	0%	6	100%	0	0%	0	0%	0	0%	0	0%
	5/2021	0	0%	6	100%	0	0%	0	0%	0	0%	0	0%
	6/2021	0	0%	6	100%	0	0%	0	0%	0	0%	0	0%
	All months		0%		100%		0%		0%		0%		0%

Table 1C.8 Reasons for observed discrepancies—District Level

Reasons for observed discrepancies

Indicator: Top three reasons that were given as possible reasons for observed discrepancy during the assessment
In this next table, **DQ026** corresponds to the first month, **DQ027** to the second month, and **DQ028** to the third month.

Data Source—Module Iia: RHIS Performance Diagnostic Tool (District Level)					
Indicator	**Data entry errors**	**Arithmetic errors**	**Information from submitted reports incorrectly compiled**	**Monthly reports unavailable**	**Other reason(s)**
Total births	0	0	0	3	0
Live births	0	0	0	3	0
Stillbirths	0	0	0	3	0
Low birthweight	0	0	0	3	0
Early initiation of breastfeeding	0	0	0	3	0
Bag-mask ventilation	0	0	0	3	0
Uterotonics for postpartum hemorrhage	0	0	0	3	0
KMC	0	0	0	1	0
Institutional neonatal deaths	0	0	0	2	0
Neonatal sepsis	0	0	0	0	0

D. RHIS Performance: Data Quality Indicators- Facility Level

Table 1D.1. Completeness of source documents—Facility Level

Completeness of source documents

Indicator: % of facilities with completely filled primary source documents, such as registers, patient records, etc. for selected indicators (i.e., source documents contain the data relevant to the selected indicators)

$$\frac{\text{Total \# of assessed facilities with a completely filled primary source document}}{\text{Total \# of assessed facilities expected to report on the selected indicators}} \times 100$$

Data Source—Module Iib: RHIS Performance Diagnostic Tool (HF Level)				
Indicator	**Period**	**Numerator**	**Denominator**	**Value**
Total births	4/2021	10	16	63%
	5/2021	10	16	63%
	6/2021	10	16	63%
	All months	30	48	63%
Live births	4/2021	9	16	56%
	5/2021	9	16	56%
	6/2021	9	16	56%
	All months	27	48	56%
Stillbirths	4/2021	8	16	50%
	5/2021	8	16	50%
	6/2021	8	16	50%
	All months	24	48	50%
Low birthweight	4/2021	9	16	56%
	5/2021	9	16	56%
	6/2021	9	16	56%
	All months	27	48	56%
Early initiation of breastfeeding	4/2021	9	16	56%
	5/2021	9	16	56%
	6/2021	9	16	56%
	All months	27	48	56%
Bag-mask ventilation	4/2021	4	11	36%
	5/2021	4	11	36%
	6/2021	4	11	36%
	All months	12	33	36%
Uterotonics for postpartum hemorrhage	4/2021	9	16	56%
	5/2021	9	16	56%
	6/2021	9	16	56%
	All months	27	48	56%
KMC	4/2021	7	7	100%
	5/2021	7	7	100%
	6/2021	7	7	100%
	All months	21	21	100%
Institutional neonatal deaths	4/2021	6	11	55%
	5/2021	6	11	55%
	6/2021	6	11	55%
	All months	18	33	55%
Neonatal sepsis	4/2021	0	21	0%
	5/2021	0	21	0%
	6/2021	0	21	0%
	All months	0	63	0%

Table 1D.2 Completeness of reported data—Facility Level

Completeness of reported data

$$\frac{\text{Total \# of assessed facilities that submitted a complete report for selected indicators}}{\text{Total \# of assessed facilities expected to report on the selected indicators}} \times 100$$

Scenario 2

This scenario is valid either: (1) when the assessment happens at health facility level only, or (2) when the sampled health facilities are located outside of the sampled districts.

Data Source—Module IIb: RHIS Performance Diagnostic Tool (HF Level)				
Indicator	**Period**	**Numerator**	**Denominator**	**Value**
Total births	4/2021	15	16	94%
	5/2021	16	16	100%
	6/2021	14	16	88%
	All months	45	48	94%
Live births	4/2021	15	16	94%
	5/2021	14	16	88%
	6/2021	16	16	100%
	All months	45	48	94%
Stillbirths	4/2021	15	16	94%
	5/2021	14	16	88%
	6/2021	16	16	100%
	All months	45	48	94%
Low birthweight	4/2021	15	16	94%
	5/2021	14	16	88%
	6/2021	16	16	100%
	All months	45	48	94%
Early initiation of breastfeeding	4/2021	15	16	94%
	5/2021	14	16	88%
	6/2021	16	16	100%
	All months	45	48	94%
Bag-mask ventilation	4/2021	9	11	82%
	5/2021	8	11	73%
	6/2021	10	11	91%
	All months	27	33	82%
Uterotonics for postpartum hemorrhage	4/2021	15	16	94%
	5/2021	14	16	88%
	6/2021	16	16	100%
	All months	45	48	94%
KMC	4/2021	3	7	43%
	5/2021	3	7	43%
	6/2021	3	7	43%
	All months	9	21	43%
Institutional neonatal deaths	4/2021	9	11	82%
	5/2021	9	11	82%
	6/2021	10	11	91%
	All months	28	33	85%
Neonatal sepsis	4/2021	11	21	52%
	5/2021	11	21	52%
	6/2021	11	21	52%
	All months	33	63	52%

Table 1D.3 Reasons for lack of availability of data sources—Facility Level

Reasons for no availability of data sources

Data Source—Module IIb: RHIS Performance Diagnostic Tool (HF Level)					
Indicator	**Storage or archiving problems**	**Staffing issue(s)**	**Not understanding the data element(s)**	**Presence of other vertical reporting requirements**	**Other (specify):**
Total births	1	4	0	0	2
Low birthweight	1	4	0	0	3
Stillbirths	1	3	0	0	5
Live births	1	5	0	0	2
Early initiation of breastfeeding	1	5	0	0	2
Bag-mask ventilation	1	5	0	0	2
Uterotonics for postpartum hemorrhage	1	5	0	0	2
KMC	0	0	0	0	0
Institutional neonatal deaths	1	5	0	0	0
Neonatal sepsis	0	11	0	0	10
Overall	8	47	0	0	28

Table 1D.4 Availability of facility reports

Availability of facility reports

Indicator: % of expected monthly reports of selected indicators that are available at the facility level

$$\frac{\text{Total \# of available facility reports containing the selected indicator(s) at the assessed facilities}}{\text{Total \# of assessed facilities expected to report on the selected indicator(s)}} \times 100$$

Data Source—Module IIb: RHIS Performance Diagnostic Tool (HF Level)				
Indicator	**Period**	**Numerator**	**Denominator**	**Value**
Total births	4/2021	15	16	94%
	5/2021	14	16	88%
	6/2021	16	16	100%
	All months	45	48	94%
Live births	4/2021	15	16	94%
	5/2021	14	16	88%
	6/2021	16	16	100%
	All months	45	48	94%
Stillbirths	4/2021	15	16	94%
	5/2021	14	16	88%
	6/2021	16	16	100%
	All months	45	48	94%
Low birthweight	4/2021	15	16	94%
	5/2021	14	16	88%
	6/2021	16	16	100%
	All months	45	48	94%
Early initiation of breastfeeding	4/2021	15	16	94%
	5/2021	14	16	88%
	6/2021	16	16	100%
	All months	45	48	94%
Bag-mask ventilation	4/2021	10	11	91%
	5/2021	9	11	82%
	6/2021	11	11	100%
	All months	30	33	91%
Uterotonics for postpartum hemorrhage	4/2021	15	16	94%
	5/2021	14	16	88%
	6/2021	16	16	100%
	All months	45	48	94%
KMC	4/2021	3	7	43%
	5/2021	3	7	43%
	6/2021	3	7	43%
	All months	9	21	43%
Institutional neonatal deaths	4/2021	10	11	91%
	5/2021	9	11	82%
	6/2021	11	11	100%
	All months	30	33	91%
Neonatal sepsis	4/2021	21	21	100%
	5/2021	21	21	100%
	6/2021	21	21	100%
	All months	63	63	100%

Table 1D.5 Accuracy of facility reporting

Accuracy of reported data

Indicators:

% of facilities where data recorded in source documents are exactly matching reported data of selected indicator (target=95%)

% of facilities that scored VF between 95%–105% for selected indicator

% of facilities that scored VF between 90%–110% for selected indicator

% of facilities that over-reported the selected indicator (<90%)

% of facilities that under-reported the selected indicator (>110%)

$$\frac{\text{Sum of all Facility Verification Factors}}{\text{Total \# of assessed facilities}} \times 100$$

The facility global accuracy = 100—Average facility VF deviation

Data can be arranged according to the different indicators in the data analysis phase.

Data Source—Module IIb: RHIS Performance Diagnostic Tool (HF Level)					Facility global Accuracy
Indicator	**Period**	**Numerator**	**Denominator**	**Value**	**CGA**
Total births	4/2021	0.43	16	3%	97%
	5/2021	0.15	16	1%	99%
	6/2021	0.53	16	3%	97%
	All months	1.11	48	2%	98%
Live births	4/2021	0.36	16	2%	98%
	5/2021	0.35	16	2%	98%
	6/2021	0.21	16	1%	99%
	All months	0.92	48	2%	98%
Stillbirths	4/2021	0.60	16	4%	96%
	5/2021	0.55	16	3%	97%
	6/2021	0.90	16	6%	94%
	All months	2.05	48	4%	96%
Low birthweight	4/2021	1.14	16	7%	93%
	5/2021	1.30	16	8%	92%
	6/2021	2.30	16	14%	86%
	All months	4.74	48	10%	90%
Early initiation of breastfeeding	4/2021	0.35	16	2%	98%
	5/2021	0.22	16	1%	99%
	6/2021	0.11	16	1%	99%
	All months	0.68	48	1%	99%
Bag-mask ventilation	4/2021	5.75	11	52%	48%
	5/2021	2.00	11	18%	82%
	6/2021	3.50	11	32%	68%
	All months	11.25	33	34%	66%
Uterotonics for postpartum hemorrhage	4/2021	0.38	16	2%	98%
	5/2021	0.29	16	2%	98%
	6/2021	0.44	16	3%	97%
	All months	1.11	48	2%	98%
KMC	4/2021	0.00	7	0%	100%
	5/2021	0.00	7	0%	100%
	6/2021	0.00	7	0%	100%
	All months	0.00	21	0%	100%

Institutional neonatal deaths	4/2021	0.00	11	0%	100%
	5/2021	0.00	11	0%	100%
	6/2021	0.00	11	0%	100%
	All mont	0.00	33	0%	100%
Neonatal sepsis	4/2021	0.00	21	0%	100%
	5/2021	0.00	21	0%	100%
	6/2021	0.00	21	0%	100%
	All mont	0.00	63	0%	100%

Indicator: % of facilities where data recorded in source documents and reported data of selected indicator are meeting the set criteria for data accuracy

		A						B					
		% <90%		90%<=%<110%		%>=110%		% <80%		80%<=%<120%		%>=120%	
Indicator	**Period**	**#**	**%**	**#**	**%**	**#**	**%**	**#**	**%**	**#**	**%**	**#**	**%**
Total births	4/2021	2	13%	11	69%	0	0%	1	6%	12	75%	0	0%
	5/2021	0	0%	12	75%	0	0%	0	0%	12	75%	0	0%
	6/2021	1	6%	11	69%	2	13%	0	0%	14	88%	0	0%
	All months		6%		71%		4%	1	2%	38	79%	0	0%
Live births	4/2021	2	13%	11	69%	0	0%	0	0%	13	81%	0	0%
	5/2021	1	6%	11	69%	0	0%	0	0%	12	75%	0	0%
	6/2021	0	0%	14	88%	0	0%	0	0%	14	88%	0	0%
	All months		6%		75%		0%		0%		81%		0%
Stillbirths	4/2021	1	6%	11	69%	0	0%	1	6%	11	69%	0	0%
	5/2021	2	13%	9	56%	0	0%	2	13%	9	56%	0	0%
	6/2021	3	19%	10	63%	0	0%	3	19%	10	63%	0	0%
	All months		13%		63%		0%		13%		63%		0%
Low birthweight	4/2021	3	19%	9	56%	1	6%	3	19%	9	56%	1	6%
	5/2021	2	13%	8	50%	2	13%	2	13%	8	50%	2	13%
	6/2021	2	13%	10	63%	2	13%	2	13%	10	63%	2	13%
	All months		15%		56%		10%		15%		56%		10%
Early initiation of breastfeeding	4/2021	2	13%	11	69%	0	0%	0	0%	13	81%	0	0%
	5/2021	1	6%	11	69%	0	0%	0	0%	12	75%	0	0%
	6/2021	0	0%	14	88%	0	0%	0	0%	14	88%	0	0%
	All months		6%		75%		0%		0%		81%		0%
Bag-mask ventilation	4/2021	2	18%	4	36%	2	18%	2	18%	4	36%	2	18%
	5/2021	2	18%	4	36%	1	9%	2	18%	4	36%	1	9%
	6/2021	1	9%	7	64%	1	9%	1	9%	7	64%	1	9%
	All months		15%		45%		12%		15%		45%		12%
Uterotonics for postpartum hemorrhage	4/2021	2	13%	11	69%	0	0%	0	0%	13	81%	0	0%
	5/2021	1	6%	11	69%	0	0%	0	0%	12	75%	0	0%
	6/2021	1	6%	12	75%	1	6%	0	0%	14	88%	0	0%
	All months		8%		71%		2%		0%		81%		0%
KMC	4/2021	0	0%	3	43%	0	0%	0	0%	3	43%	0	0%
	5/2021	0	0%	3	43%	0	0%	0	0%	3	43%	0	0%
	6/2021	0	0%	3	43%	0	0%	0	0%	3	43%	0	0%
	All months		0%		43%		0%		0%		43%		0%
Institutional	4/2021	0	0%	10	91%	0	0%	0	0%	10	91%	0	0%

neonatal deaths	5/2021	0	0%	9	82%	0	0%	0	0%	9	82%	0	0%
	6/2021	0	0%	11	100%	0	0%	0	0%	11	100%	0	0%
	All months		0%		91%		0%		0%		91%		0%
Neonatal sepsis	4/2021	0	0%	5	24%	0	0%	0	0%	5	24%	0	0%
	5/2021	0	0%	3	14%	0	0%	0	0%	3	14%	0	0%
	6/2021	0	0%	5	24%	0	0%	0	0%	5	24%	0	0%
	All months		0%		21%		0%		0%		21%		0%

1E. Summary Tables for Data Quality Indicators

			Central			Regional			District			Facility		
Domain	**Indicator**		**Numerator**	**Denominator**	**%**	**Numerator**	**Denominator**	**%**	**Numerator**	**Denominator**	**%**	**Numerator**	**Denominator**	**%**
Completeness of facility reporting	**% of expected monthly facility reports received at the level**		*	*	*	*	*	*	759	759	100%			
	Reasons for default of report completeness	Storage or archiving problems	*	*	*	*	*	*						
		Staffing issues	*	*	*	*	*	*						
		Absence of reporting forms	*	*	*	*	*	*						
		Transportation issues	*	*	*	*	*	*						
		Internet connectivity issues	*	*	*	*	*	*						
		Presence of other vertical reporting requirements	*	*	*	*	*	*						
		Other (specify)	*	*	*	*	*	*						
	% of expected monthly reports of selected indicators available at the level	Total births							639	639	100%	45	48	94%
		Live births							639	639	100%	45	48	94%
		Stillbirths							639	639	100%	45	48	94%
		Low birthweight							111	111	100%	45	48	94%
		Early initiation of breastfeeding							639	639	100%	45	48	94%
		Bag-mask ventilation							111	111	100%	30	33	91%
		Uterotonics for postpartum hemorrhage							111	111	100%	45	48	94%
		KMC							111	111	100%	9	21	43%
		Institutional neonatal deaths							111	111	100%	30	33	91%
		Neonatal sepsis							231	231	100%	63	63	100%
Completeness of reported data	**% of monthly reports completely filled**	Total births							639	639	100%	45	48	94%
		Live births							639	639	100%	45	48	94%

			Central			Regional			District			Facility		
Domain	**Indicator**		**Numerator**	**Denominator**	**%**	**Numerator**	**Denominator**	**%**	**Numerator**	**Denominator**	**%**	**Numerator**	**Denominator**	**%**
	with data for selected indicators	Stillbirths							639	639	100%	45	48	94%
		Low birthweight							111	111	100%	45	48	94%
		Early initiation of breastfeeding							639	639	100%	45	48	94%
		Bag-mask ventilation							111	111	100%	27	33	82%
		Uterotonics for postpartum hemorrhage							111	111	100%	45	48	94%
		KMC							111	111	100%	9	21	43%
		Institutional neonatal deaths							111	111	100%	28	33	85%
		Neonatal sepsis							12	231	5%	33	63	52%
	Reasons for missing data	Staffing issue(s)							12	231	5%	33	63	52%
		Not understanding the data element(s)							0	5	0%	47	83	57%
		Presence of other vertical reporting requirements							0	5	0%	0	83	0%
		Storage or archiving problems							0	5	0%	0	83	0%
		Other										8	83	10%
Completeness of source documents	**% of facilities with completely filled primary source**	Total Births										30	48	63%
		Live births										27	48	56%
		Stillbirths										24	48	50%

			Central			Regional			District			Facility		
Domain	**Indicator**		**Numerator**	**Denominator**	**%**	**Numerator**	**Denominator**	**%**	**Numerator**	**Denominator**	**%**	**Numerator**	**Denominator**	**%**
	documents, such as registers, patient records, etc. for selected indicators (i.e., source documents contain the data relevant to the selected indicators)	Low birthweight										27	48	56%
		Early initiation of breastfeeding										27	48	56%
		Bag-mask ventilation										12	33	36%
		Uterotonics for postpartum hemorrhage										27	48	56%
		KMC										21	21	100%
		Institutional neonatal deaths										18	33	55%
		Neonatal sepsis										0	63	0%
Timeliness of facility reporting	**Timeliness of facility reporting**	**% of facilities submitting monthly reports on time to the aggregation site**	*	*	*	*	*	*	630	759	83%			
Accuracy of reported data	**<u>Central/ Regional District definition</u>** **% of accuracy between data entered in the district/ regional**	Total Births									89%			98%
		Live births									89%			98%
		Stillbirths									100%			96%
		Low birthweight									100%			90%

			Central			Regional			District			Facility		
Domain	**Indicator**		**Numerator**	**Denominator**	**%**	**Numerator**	**Denominator**	**%**	**Numerator**	**Denominator**	**%**	**Numerator**	**Denominator**	**%**
	or national database and the facility monthly report for selected indicators (target=100%)	Early initiation of breastfeeding									89%			99%
		Bag-mask ventilation		`							100%			66%
		Uterotonics for postpartum hemorrhage									0%			98%
	<u>Facility definition</u>	KMC									100%			100%
	% of facilities where data recorded in source documents are exactly matching reported data of selected indicator (target=95%)	Institutional neonatal deaths									100%			100%
		Neonatal sepsis									100%			100%
	Reasons for observed discrepancies	Data entry errors									0			
		Arithmetic errors									0			
		Information from submitted reports incorrectly compiled									0			
		Monthly reports unavailable									0			
		Other reasons									0			

2. RHIS Performance: Use of Information Indicators

A. RHIS Performance: Use of Information Indicator- Central Level

2A. Use of Information Indicators—Central Level

Section 2A Tables: Use of Information Indicators—Central Level

Table 2A.1 Use of data to produce narrative analytical reports

Use of data to produce narrative analytical reports

Indicator: % of sites producing analytical reports

$$\frac{\text{Total \# of sites producing analytical reports}}{\text{Total \# of sites assessed (=1)}} \times 100$$

Keep in mind that at the central level, the number of sites is 1.

Data Source—Module IIa: RHIS Performance Diagnostic Tool (Central Level)			
Indicator	**Numerator**	**Denominator**	**%**
Central office produces any report or bulletin based on analysis of RHIS data	*	*	*

* not collected during this EN-MINI-PRISM Tools pilot assessment

Use of information for performance review

Indicator: Mean score on the use of routine data for RHIS quality improvement, performance review, and evidence-based decision making

$$\frac{\text{Sum of each site's score}}{\text{Total \# of sites assessed (1) x 5}} \times 100$$

Table 2A.2 Use of information for performance review

Data Source—Module IIa: RHIS Performance Diagnostic Tool (Central Level)				
	Indicator	**Numerator**	**Denominator**	**%**
Average score of use	Use of routine data for RHIS quality improvement, performance review, and evidence-based decision making	*	*	*
Individual scores of use	Discussion on RHIS management	*	*	*
	Decisions made on RHIS issues	*	*	*
	Follow-up of the decisions	*	*	*
	Discussion on key performance targets	*	*	*
	Decision made on health facility (HF) performance	*	*	*

* not collected during this EN-MINI-PRISM Tools pilot assessment

Table 2A.2a Indicator: Mean scores on discussions held to review key performance targets

Indicator: Mean scores on discussions held to review key performance targets

Were discussions held to review key performance targets (tracking progress against targets) based on RHIS data? Such as:			
Indicator	**Numerator**	**Denominator**	**%**
1. Coverage of services, like ANC, delivery, EPI, or TB	*	*	*
2. Hospital/health center performance indicators	*	*	*
3. Major neonatal morbidity diagnoses (e.g., top ten diseases: retinopathy, growth faltering, kernicterus, jaundice)	*	*	*
4. Identification of emerging issues/epidemics	*	*	*
5. Medicine stock outs	*	*	*
6. Human resource management	*	*	*
7. Sex-disaggregated data, e.g., total births	*	*	*

* not collected during this EN-MINI-PRISM Tools pilot assessment

Table 2A.2b Indicator: Mean scores for any decisions made based on health facility performance

Indicator: Mean scores for any decisions made based on health facility's performance

Decisions made based on the discussion of the district and/or health facility's performance			
Indicator	**Numerator**	**Denominator**	**%**
1. Formulation of plans	*	*	*
2. Budget preparation	*	*	*
3. Budget reallocation	*	*	*
4. Medicine supply and drug management	*	*	*
5. Human resource management (training, reallocation, etc.)	*	*	*
6. Advocacy for policy, programmatic, or strategic decisions from higher levels	*	*	*
7. Health services (preventive, promotive, clinical, rehabilitative) planning	*	*	*
8. Promotion of service quality/improvement	*	*	*
9. Reducing the gender gap in the provision of health services	*	*	*
10. Involvement of the community and local government	*	*	*
11. No action required at this time	*	*	*

* not collected during this EN-MINI-PRISM Tools pilot assessment

Table 2A.3 Types of issues covered in annual plans demonstrating RHIS data use

Type of issues covered in annual plans demonstrating RHIS data use

$$\frac{\text{Presence of specific issue area via activities or targets contained in annual plan}}{\text{Total \# of sites that have an annual plan for the current year (=1)}} \times 100$$

Data Source—Module IIa: RHIS Performance Diagnostic Tool (Central Level)				
	Indicator	**Numerator**	**Denominator**	**%**
Annual plan contains activities and/or targets related to improving or addressing:	Service coverage	*	*	*
	Health facility performance	*	*	*
	Neonatal morbidity diagnoses	*	*	*
	Emerging issues/epidemics	*	*	*
	Medicine stock outs	*	*	*
	HR management	*	*	*
	Gender disparity	*	*	*

* not collected during this EN-MINI-PRISM Tools pilot assessment

Table 2A.4 Data dissemination outside the health sector

Data dissemination outside the health sector

Indicator: % of sites disseminating RHIS information to stakeholders outside of the health sector

$$\frac{\text{Total \# of sites with health indicator performance reports}}{\text{Total \# of sites assessed (=1)}} \times 100$$

Data Source—Module IIa: RHIS Performance Diagnostic Tool (Central Level)			
Indicator	**Numerator**	**Denominator**	**%**
Central level has to submit/present health indicator performance reports to a central council of public representatives/civil administration	*	*	*

* not collected during this EN-MINI-PRISM Tools pilot assessment

Table 2A.5 Proportion of sites using/sharing data from the health indicators performance report

Indicator: Proportion of sites using/sharing data from the health indicators performance report

$$\frac{\text{Total \# of sites with data shared or used}}{\text{Total \# of sites with health indicator performance reports}} \times 100$$

Data Source—Module IIa: RHIS Performance Diagnostic Tool (Central Level)			
Indicators	**Numerator**	**Denominator**	**%**
Reports/presentations use data from the RHIS to report on the health sector's progress	*	*	*
Website is updated at least annually for accessing the central level's RHIS data by the general public	*	*	*
Central level performance data shared with the general public via bulletin board chalkboard, and/or local publication	*	*	*

* not collected during this EN-MINI-PRISM Tools pilot assessment

2B. Use of Information Indicators—Regional Level

Section 2B. Tables: Use of information indicator—Regional Level

B. RHIS Performance: Use of Information Indicator- Regional Level

Use of data to produce narrative analytical reports
Indicator: % of sites producing analytical reports

$$\frac{\text{Total \# of sites producing analytical reports}}{\text{Total \# of sites assessed}} \times 100$$

Table 2B.1 Use of data to produce narrative analytical reports—Region Level diagnostic

Data Source—Module IIa: RHIS Performance Diagnostic Tool (Region Level)			
Indicator	**Numerator**	**Denominator**	**%**
Regional office produces any report or bulletin based on analysis of RHIS data	*	*	*

* not collected during this EN-MINI-PRISM Tools pilot assessment

Table 2B.2 Use of information for performance review—Region Level diagnostic

Use of information for performance review

Indicators: Individuals and average scores on the use of routine data for RHIS quality improvement, performance review, and evidence-based decision making

$$\frac{\text{Sum of each site's score}}{\text{Total \# of sites assessed x 5}} \text{ X } 100$$

Data Source—Module IIa: RHIS Performance Diagnostic Tool (Region Level)								
		Use of information among all regions			Use for information among regions with meeting minutes		
Indicator		**Numerator**	**Denominator**	**%**	**Numerator**	**Denominator**	**%**
Average score of use	Use of routine data for RHIS quality improvement, performance review, and evidence-based decision making	*	*	*	*	*	*
Individual scores of use	Discussion on RHIS management	*	*	*	*	*	*
	Decisions made on RHIS issues	*	*	*	*	*	*
	Follow-up of the decisions	*	*	*	*	*	*
	Discussion on key performance targets	*	*	*	*	*	*
	Decision made on HF performance	*	*	*	*	*	*

* not collected during this EN-MINI-PRISM Tools pilot assessment

Table 2B.3 Indicator: Discussions held to review key performance targets

Indicator: Score individuals on discussions held to review key performance targets			
Were discussions held to review key performance targets (tracking progress against targets) based on RHIS data, such as:			
Indicator	**Numerator**	**Denominator**	**%**
1. Coverage of services, like ANC, delivery, EPI, or TB	*	*	*
2. Hospital/health center performance indicators	*	*	*
3. Major neonatal morbidity diagnoses (e.g., top ten diseases: retinopathy, growth faltering, kernicterus, jaundice)	*	*	*
4. Identification of emerging issues/epidemics	*	*	*
5. Medicine stock outs	*	*	*
6. Human resource management	*	*	*
7. Sex-disaggregated data, e.g., total births	*	*	*

* not collected during this EN-MINI-PRISM Tools pilot assessment

Table 2B.4 Indicator: Decisions made based on health facility's performance

Indicator: Scores individuals on any decisions made based on health facility's performance			
Decisions made based on the discussions of the health facility's performance, such as:			
Indicator	**Numerator**	**Denominator**	**%**
1. Formulation of plans	*	*	*
2. Budget preparation	*	*	*
3. Budget reallocation	*	*	*
4. Medicine supply and drug management	*	*	*
5. Human resource management (training, reallocation, etc.)	*	*	*
6. Advocacy for policy, programmatic, or strategic decisions from higher levels	*	*	*
7. Health services (preventive, promotive, clinical, rehabilitative) planning	*	*	*
8. Promotion of service quality/improvement	*	*	*
9. Reducing the gender gap in the provision of health services	*	*	*
10. Involvement of the community and local government	*	*	*
11. No action required at this time	*	*	*

* not collected during this EN-MINI-PRISM Tools pilot assessment

Table 2B.5 Types of issues covered in annual plans demonstrating RHIS data use—Region Level diagnostic

Type of issues covered in annual plans demonstrating RHIS data use

$$\frac{\text{Presence of specific issue area via activities or targets contained in current year annual plan}}{\text{Total \# of sites that have an annual plan for the current year}} \times 100$$

Data Source—Module IIa: RHIS Performance Diagnostic Tool (Region Level)				
Indicator		**Numerator**	**Denominator**	**%**
Annual plan contains activities and/or targets related to improving or addressing:	Service coverage	*	*	*
	Health facility performance	*	*	*
	Neonatal morbidity diagnoses	*	*	*
	Emerging issues/epidemics	*	*	*
	Medicine stock outs	*	*	*
	HR management	*	*	*
	Gender disparity	*	*	*

* not collected during this EN-MINI-PRISM Tools pilot assessment

Table 2B.6 Data dissemination outside the health sector—Region Level diagnostic for RHIS performance

Data dissemination outside the health sector

Indicator: % of sites disseminating RHIS information to stakeholders outside of the health sector

$$\frac{\text{Total \# of sites with health indicator performance reports}}{\text{Total \# of sites assessed}} \times 100$$

Data Source—Module IIa: RHIS Performance Diagnostic Tool (Region Level)			
Indicator	**Numerator**	**Denominator**	**%**
Region has to submit/present health indicator performance reports to a regional council of public representatives/civil administration	*	*	*

* not collected during this EN-MINI-PRISM Tools pilot assessment

Table 2B.7 Proportion of sites using/sharing data from the health indicators performance report

Indicator: Proportion of sites using/sharing data from the health indicators performance report

$$\frac{\text{Total \# of sites with data shared or used}}{\text{Total \# of sites with health indicator performance reports}} \times 100$$

Data Source—Module IIa: RHIS Performance Diagnostic Tool (Region Level)			
Indicators	**Numerator**	**Denominato**	**%**
Reports/presentations usea from the RHIS to report on the healtector's progress	*	*	*
Website is updated at leas annually for accessing the region's RHI data by the general public	*	*	*
Region performance data arshared with the general public via bulletn board or chalkboard, and/or local puication	*	*	*

* not collected during this EN-MINI-PRISM Tools pilot assessment

2C. Use of Information Indicators—District Level

Section 2C. Tables: RHIS performance: use of information indicator—District Level

A. RHIS Performance: Use of Information Indicator- District Level

Table 2C.1 Use of data to produce narrative analytical reports—District Level RHIS Performance Diagnostic

Use of data to produce narrative analytical reports
Indicator: % of sites producing analytical reports

$$\frac{\text{Total \# of sites producing analytical reports}}{\text{Total \# of sites assessed}} \times 100$$

Data Source—Module IIa: RHIS Performance Diagnostic Tool (District Level)			
Indicator	**Numerato**	**Denominato**	**%**
District office produces anyeport or bulletin based on analysis of RHIS a	6	6	00%

Table 2C.2 Use of information for performance review—District Level

Use of information for performance review

Indicator: Average score on the use of routine data for RHIS quality improvement, performance review, and evidence-based decision making

$$\frac{\text{Sum of each site's score}}{\text{Total \# of sites assessed x 5}} \times 100$$

Data Source—Module IIa: RHIS Performance Diagnostic Tool (District Level)							
		Uf information among all districts			Use for information among districts with meeting minutes		
Indicator		**Numeror**	**Denomiator**	%	**Numeror**	**Denomiator**	%
Average score of use	Use of routine data for RHIS quality improvement, performance review, and evidence-based decision making	28	30	93%	28	30	93%
Individua scores o use	Discussion on RHIS management	6	6	100%	6	6	100%
	Decisions made on RHIS issues	5	6	83%	5	6	83%
	Follow-up of the decisions	5	6	83%	5	6	83%
	Discussion on ke performance targets	6	6	100%	6	6	100%
	Decision made o health facility (HF performance	6	6	100%	6	6	100%

Table 2C.3 Indicator for tracking progress against targets

Were discussions held to review key performance targets (tracking progress against targets) based on RHIS data, such as:			
Indicator	**Numerato**	**Denominato**	**%**
1. Coverage of services, ike early initiation of breastfeeding, -mask ventilation, birthweight/low bithweight, etc.	5	6	83%
2. Hospital/health center formance indicators	5	6	83%
3. Major neonatal morbidty diagnoses (e.g., top ten diseases: retiopathy, growth faltering, kernicterus, jaundie)	5	6	83%
4. Identification of emergig issues/epidemics	6	6	100%
5. Medicine stock outs	6	6	100%
6. Human resource manment	6	6	100%
7. Sex-disaggregated dat e.g., total births	2	6	33%

Table 2C.4 Indicator for discussions of health facility performance

Decisions made based on the discussions of the health facility's performance, such as:			
Indicatr	**Numerato**	**Denominato**	**%**
1. Formulation of plans	6	6	100%
2. Budget preparation	3	6	50%
3. Budget reallocation	3	6	50%
4. Medicine supply and drmanagement	6	6	100%
5. Human resource manment (training, reallocation, etc.)	4	6	67%
6. Advocacy for policy, prgrammatic, or strategic decisions from gher levels	1	6	17%
7. Health services (preveive, promotive, clinical, rehabilitative) plnning	5	6	83%
8. Promotion of service qity/improvement	6	6	100%
9. Reducing the gender in the provision of health services	1	6	17%
10. Involvement of the cmunity and local government	4	6	67%
11. No action required athis time	0	6	0%

Table 2C.5 Types of issues covered in the annual plans demonstrating RHIS data use

Indicator: Type of issues covered in the annual plans demonstrating RHIS data use

$$\frac{\text{Presence of specific issue area via activities or targets contained in current year annual plan}}{\text{Total \# of sites that have an annual plan for the current year}} \times 100$$

Da Source— Module IIa: RHIS Performance Diagnostic Tool (District Level)				
Inicator		**umerator**	**Denomnator**	**%**
Annual plan contains activities and/or targets related to improving or addressing:	Service coverage	5	6	83%
	Health facility performance	6	6	100%
	Diseases	6	6	100%
	Emerging issues/epidemics	6	6	100%
	Medicine stock os	6	6	100%
	HR management	6	6	100%
	Gender disparity	0	6	0%

Table 2C.6. Data dissemination outside the health sector—District Level diagnostic for RHIS performance

Data dissemination outside the health sector

Indicator: % of sites disseminating RHIS information to stakeholders outside of the health sector

$$\frac{\text{Total \# of sites with health indicator performance reports}}{\text{Total \# of sites assessed}} \times 100$$

Data Source—Module IIa: RHIS Performance Diagnostic Tool (District Level)			
Indicato	**Numerator**	**Denominator**	
District has to submit/prese health indicator performance reports to a disrict council of public representatives/civil ainistration	4	6	67%

Table 2C.7. Proportion of sites using/sharing data from the health indicators performance reports—District Level

Indicator: Proportion of sites using/sharing data from the health indicators performance report

$$\frac{\text{Total \# of sites with data shared or used}}{\text{Total \# of sites with health indicator performance reports}} \times 100$$

Data Source—Module IIa: RHIS Performance Diagnostic Tool (District Level)			
Indicators	**Numerator**	**Denominato**	**%**
Reports/presentations use datrom the RHIS to report on the health ector's progress	4	4	100%
Website is updated at leastnually for accessing the district's RHISta by the general public	4	4	100%
District performance data sed with the general public via bulletin bod or chalkboard and/or local pubication	6	4	150%

2D. Use of Information Indicators—Facility Level

Section 2D Tables: RHIS performance: Use of information indicator—Facility Level

B. RHIS Performance: Use of Information Indicator- Facility Level

Use of data to produce narrative analytical reports
Indicator: % of sites producing analytical reports

$$\frac{\text{Total \# of sites producing analytical reports}}{\text{Total \# of sites assessed}} \times 100$$

Table 2D.1 Use of data to produce narrative analytical reports—RHIS performance—Facility Level

Data Source—Module IIb: RHIS Performance Diagnostic Tool (HF Level)			
Indicato	**Numerator**	**Denominato**	**%**
Health facility produces an report or bulletin based on the analysis of RIS data	7	21	33%

Table 2D.2 Use of information for performance review—Facility Level

Use of information for performance review
Indicators: Average score on the use of routine data for RHIS quality improvement, performance review, and evidence-based decision making

$$\frac{\text{Sum of each site's score}}{\text{Total \# of sites assessed x 5}} \text{ X } 100$$

We consider the sum of FU016e = 1 to be the number of respondents who answered "yes" to any—but at least 1—of the 7 sub-questions under FU016e. The same weight is attributed to a respondent who answered "yes" to 1 or 7 of the sub-questions.

We consider the sum of FU017 = 1 to be the number of respondents who answered "yes" to any—but at least 1—of the 9 sub-questions under FU017. The same weight is attributed to a respondent who answered "yes" to 1 or 9 of the sub-questions.

Data Source—Module IIa: RHIS Performance Diagnostic Tool, use of information for all facilities							
		Use information for all facilities			Use of information for facilities having meeting minutes		
Indicator		umeror	Denomiator	%	umeror	Denomiator	%
Average score of use	Use of routine data for RHIS quality improvement, performance review, and evidence-based decision making	46	105	44%	46	80	58%
Individua scores o use	Discussion of RHIS management	11	21	52%	11	16	69%
	Decisions made on RHIS issues	6	21	29%	6	16	38%
	Follow-up on the decisions	5	21	24%	5	16	31%
	Discussion of key performance targets	12	21	57%	12	16	75%
	Decision made on health facility (HF) performance	12	21	57%	12	16	75%

Table 2D.3 Indicator: Tracking progress against targets

Were discussions held to review key performance targets (tracking progress against targets) based on RHIS data, such as:			
Indicato	**Numerator**	**Denominato**	**%**
1. Coverage of services,ike early initiation of breastfeeding, bag-mk ventilation, birthweight/low birthwei, etc.	10	21	48%
2. Hospital/health center formance indicators	11	21	52%
3. Major neonatal morbidty diagnoses (e.g., top ten diseases: rinopathy, growth faltering, kernictus, jaundice)	10	21	48%
4. Identification of emergig issues/epidemics	12	21	57%
5. Medicine stock outs	12	21	57%
6. Human resource manment	12	21	57%
7. Sex-disaggregated dat e.g. , total births	5	21	24%

Table 2D.4 Indicator: Decisions made based on discussions of health facility performance

Were any decisions made based on the discussions of the health facility's performance, such as:			
Indicato	**Numerator**	**Denominato**	**%**
1. Formulation of plans	12	21	57%
2. Budget preparation	3	21	14%
3. Budget reallocation	3	21	14%
4. Medicine supply and drmanagement	10	21	48%
5. Human resource manageent (training, reallocation, etc.)	5	21	24%
6. Advocacy for policy, proammatic, or strategic decisions from hier levels	2	21	10%
7. Promotion of service qualty/improvement	11	21	52%
8. Reducing the gender gap n the provision of health services	3	21	14%
9. No action required at thi time	4	21	19%

Table 2D.5 Issues covered in annual plans demonstrating RHIS data use—Facility Level

Type of issues covered in the annual plans demonstrating RHIS data use

$$\frac{\text{Presence of specific issue area via activities or targets contained in current year annual plan}}{\text{Total \# of sites that have an annual plan for the current year}} \times 100$$

Data Source—Module IIb: RHIS Performance Diagnostic Tool (HF Level)				
Indcator		**Numeror**	**Denomnator**	**%**
Annual plan contains activities and/or targets related to improving or addressing:	Service coverage	10	11	91%
	Health facility performance	11	11	100%
	Diseases	8	11	73%
	Emerging issues/epidemics	11	11	100%
	Medicine stock os	10	11	91%
	HR management	7	11	64%
	Gender disparity	1	11	9%

Table 2D.6 Data dissemination outside the health sector—Facility Level

Data dissemination outside the health sector

Indicators: % of sites disseminating RHIS information to stakeholders outside the health sector

$$\frac{\text{Total \# of sites with health indicator performance reports}}{\text{Total \# of sites assessed}} \times 100$$

Data Source—Module IIb: RHIS Performance Diagnostic Tool (HF Level)			
Indicato	**Numerator**	**Denominator**	**%**
Health facility h to submit/present performance rets to a council/district administration	2	21	0%

Table 2D.7 Proportion of sites using/sharing data from the health indicators performance report—Facility Level

Indicator: Proportion of sites using/sharing data from the health indicators performance report

$$\frac{\text{Total \# of sites with data shared or used}}{\text{Total \# of sites with health indicator performance reports}} \times 100$$

Data Source—Module IIb: RHIS Performance Diagnostic Tool (HF Level)			
Indicators	**Numerator**	**Denominato**	**%**
Reports/presentations use datrom the RHIS to report on the health ector's progress	2	2	100%
Website is updated at leastnually for accessing the health facility' RHIS data by the general public	6	2	300%
Health facility performance da are shared with the general public via bletin boards chalkboard, and/or local publcations	2	2	100%

2E. Summary Tables for Use of Information Indicators

			Central			Regional			District			Facility		
Domain	**Indicator**		**Numeror**	**Denominator**	**%**	**Numerator**	**Denominator**	**%**	**Numeror**	**Denominator**	**%**	**Numeror**	**Denominator**	**%**
Use of data to produce narrative analytical reports	**Produces any report or bulletin based on analysis of RHIS data**	% of sites producing analytical reports	*	*	*	*	*	*	6	6	100%	7	21	33%
Use of information for performance review	**Use of routine data for RHIS quality improvement, performance review, and evidence-based decision making**	Discussion on RHIS management	*	*	*	*	*	*	6	6	100%	11	16	69%
		Decisions made on RHIS issues	*	*	*	*	*	*	5	6	83%	6	16	38%
		Follow-up of the decisions	*	*	*	*	*	*	5	6	83%	5	16	31%
		Discussion on key performance targets	*	*	*	*	*	*	6	6	100%	12	16	75%
		Decision made on health facility (HF) performance	*	*	*	*	*	*	6	6	100%	12	16	75%
		Average score of use	*	*	*	*	*	*	28	30	93%	46	80	58%

			Central			Regional			District			Facility		
Domain	**Indicator**		**Numerator**	**Denominator**	**%**	**Numerator**	**Denominator**	**%**	**Numerator**	**Denominator**	**%**	**Numerator**	**Denominator**	**%**
	Mean scores on discussions held to review key performance targets based on RHIS data?	1. Coverage of services, like early initiation of breastfeeding, bag-mask ventilation, birthweight/low birthweight, etc.	*	*	*	*	*	*	5	6	83%	10	21	48%
		2. Hospital/health center performance indicators	*	*	*	*	*	*	5	6	83%	11	21	52%
		3. Major neonatal morbidity diagnoses (e.g., top ten diseases: retinopathy, growth faltering, kernicterus jaundice)	*	*	*	*	*	*	5	6	83%	10	21	48%
		4. Identification of emerging issues/epidemics	*	*	*	*	*	*	6	6	100%	12	21	57%
		5. Medicine stock outs	*	*	*	*	*	*	6	6	100%	12	21	57%
		6. Human resource management	*	*	*	*	*	*	6	6	100%	12	21	57%
		7. Sex-disaggregat data, e.g., total birth	*	*	*	*	*	*	2	6	33%	5	21	24%
	Mean scores for any decisions	1. Formulation of plans	*	*	*	*	*	*	6	6	100%	12	21	57%
		2. Budget preparati	*	*	*	*	*	*	3	6	50%	3	21	14%
		3. Budget reallocati	*	*	*	*	*	*	3	6	50%	3	21	14%

			Central			Regional			District			Facility		
Domin	Indicator		Numeror	Denominator	%	Numerator	Denominator	%	Numeror	Denominator	%	Numeror	Denominator	%
	made based on the discussion of performanc e	4. Medicine suppl and drug management	*	*	*	*	*	*	6	6	100	10	21	48%
		5. Human resoure management (training, reallocion, etc.)	*	*	*	*	*	*	4	6	67%	5	21	24%
		6. Advocacy for policy, programmic, or strategic decisons from higher level	*	*	*	*	*	*	1	6	17%	2	21	10%
		7. Health servic (preventive, promotive, clinic, rehabilitative) planning	*	*	*	*	*	*	5	6	83%			
		8. Promotion of service quality/ improvement	*	*	*	*	*	*	6	6	100	3	21	14%
		9. Reducing the gender gap in t provision of healh services	*	*	*	*	*	*	1	6	17%	4	21	19%
		10. Involvement the community local government	*	*	*	*	*	*	4	6	67%			
		11. No action required at this tme	*	*	*	*	*	*	0	6	0%	0	0	0%
Type of issues	Annual plan contains	Service coverage	*	*	*	*	*	*	5	6	83%	10	11	91%
		Health facility	*	*	*	*	*	*	6	6	100	11	11	100

			Central			Regional			District			Facility		
Domain	**Indicator**		**Numerator**	**Denominator**	**%**	**Numerator**	**Denominator**	**%**	**Numerator**	**Denominator**	**%**	**Numerator**	**Denominator**	**%**
covered i annual plns demonstri ng RHISta use	**activities and/or targets related to improving or addressing:**	performance												%
		Neonatal morbidity diagnoses	*	*	*	*	*	*	6	6	100%	8	11	73%
		Emerging issues/epidemics	*	*	*	*	*	*	6	6	100%	11	11	100 %
		Medicine stock outs	*	*	*	*	*	*	6	6	100%	10	11	91%
		HR management	*	*	*	*	*	*	6	6	100%	7	11	64%
		Gender disparity	*	*	*	*	*	*	0	6	0%	1	11	9%
Data disseminio n outside he health sectr	**Need to submit/present health indicator performance reports to a central council of public representatives/ civil administration**		*	*	*	*	*	*	4	6	67%	2	21	10%
	Proportion of sites using/shari ng data from the health indicators performanc e report	Reports/presentation s use data from the RHIS to report on the health sector's progress	*	*	*	*	*	*	4	4	100%	2	2	100 %
		Website is updated at least annually for accessing the central level's RHIS data by the general public	*	*	*	*	*	*	4	4	100%	6	2	300 %
		Central level performance data shared with the general public via bulletin board chalkboard, and/or local publication	*	*	*	*	*	*	6	4	150%	2	2	100 %

3. RHIS Performance: Data Management Indicators

3A. Data Management Indicators—Central Level

Section 3A Tables: Data management indicators—Central Level

A. RHIS Performance: Data Management Indicators- Central Level

Table 3A.1. Data quality assurance in place at Central Level

Data quality assurance in place

Indicator: Mean score for data quality control standards in place

$$\frac{\text{Sum of data quality control scores}}{8} \times 100$$

Data Source—Module IIa: RHIS Performance Diagnostic Tool (Central Level)			
Indicator	**Numerator**	**enominator**	
Site data quality score	*	*	*

* not collected during this EN-MINI-PRISM Tools pilot assessment

Table 3A.2 Individual scores for indicators related to data quality control standards—Central Level

Indicator: Individual scores for indicators related to data quality control standards in place

$$\frac{\text{Total score for each item of DQ control standards in place}}{1} \times 100$$

Data Source—Module IIa: RHIS Performance Diagnostic Tool (Central Level)			
Indicator	**Numerator**	**Denominator**	
Central has a designated pson to review the quality of compiled data prioro submission to the next level	*	*	*
Central has written guidelin for data review and quality control	*	*	*
Designated staff are trainen data review and quality control	*	*	*
Central has written guidelin on routine health data quality assessmt/assurance	*	*	*
Central conducts data qualit assessments at health facilities	*	*	*
Central uses data quality asessment tools (e.g., lot quality assurance smpling [LQAS], routine data quality assessmnt [RDQA], in-built electronic data quality vidation rules/system)	*	*	*
Central maintains a record health facility data quality assessments cducted in the past 12 months	*	*	*
Central maintains a record feedback to health facilities on data qualty assessment findings	*	*	*

* not collected during this EN-MINI-PRISM Tools pilot assessment

Table 3A.3 Evidence of data analysis taking place at the Central Level

Evidence of data analysis taking place

Indicator: Mean score and individual scores for data analysis practice

$$\frac{\text{Sum of the site's score for carrying out data analysis}}{\text{Total \# of sites assessed x 8}} \text{ X } 100$$

Data Source—Module Iia: RHIS Performance Diagnostic Tool (Central Level)			
Indicator	**Numerator**	**Denominator**	
AVERAGE SCORE FOR DA ANALYSIS PRACTICE	*	*	*
DATA AGGREGATION	*	*	*
DEMOGRAPHIC DATA FOCATCHMENT AREA (CE)	*	*	*
CALCULATE COVERAGE IDICATORS FOR EACH CATCHMENT AA	*	*	*
COMPARISON BY REGION	*	*	*
COMPARISON WITH REGINS AND CENTRAL TARGETS	*	*	*
COMPARISON OF DATA OER TIME	*	*	*
COMPARISON OF SEX DISGGREGATION	*	*	*
COMPARISON OF SERVICCOVERAGE	*	*	*

* not collected during this EN-MINI-PRISM Tools pilot assessment

Table 3A.4 Data visualization at the Central Level

Data visualization

Indicator: Existence of use of raw RHIS data to produce data visuals

$$\frac{\text{Score of the existence of proof of using raw RHIS data to produce data visuals}}{\text{Total \# of sites assessed (=1)}} \text{ X } 100$$

Data Source—Module Iia: RHIS Performance Diagnostic Tool (Central Level)			
Indicator	**Numerator**	**enominator**	
Central office prepares data isuals showing achievements toward targets	*	*	*

* not collected during this EN-MINI-PRISM Tools pilot assessment

Table 3A.5 Feedback mechanisms in place—Central Level

Feedback mechanism in place

Indicators: Proof of existence of written feedback to the lower level based on reported RHIS data

$$\frac{\text{Existence of proof of written feedback to lower level based on reported RHIS data}}{\text{Total \# of sites assessed (=1)}} \times 100$$

Data Source—Module Iia: RHIS Performance Diagnostic Tool (Central Level)			
Indicator	**Numerator**	**Denominator**	
Central level sent feedback eports using RHIS information to health filities in the past 3 months	*	*	*

* not collected during this EN-MINI-PRISM Tools pilot assessment

3B. Data Management Indicators—Regional Level

Section 3B. Tables: Data Management Indicators—Regional Level

B. RHIS Performance: Data Management Indicators- Regional Level

Table 3B.1 Data quality assurance in place—Regional Level

Data quality assurance in place

Indicator: Average score for data quality control standards in place

$$\frac{\text{Sum of the site's data quality control score}}{\text{Total \# of sites assessed x 8}} \times 100$$

Data Source—Module Iia: RHIS Performance Diagnostic Tool (Region Level)			
Indicator	**Numerator**	**Denominator**	
Site data quality score	*	*	*

* not collected during this EN-MINI-PRISM Tools pilot assessment

Table 3B.2 Individual scores for indicators related to data quality control standards—Regional Level

Indicator: Individual scores for indicators related to data quality control standards in place

$$\frac{\text{Total \# of regions assessed with data quality control standards in place}}{\text{Total \# of regions assessed}} \times 100$$

Data Source—Module Iia: RHIS Performance Diagnostic Tool (Region Level)			
Indicator	**Numerator**	**Denominator**	
Region has a designated peron to review the quality of compiled data prioro submission to the next level	*	*	*
Region has written guidelin for data review and quality control	*	*	*
Designated staff are trainen data review and quality control	*	*	*
Region has written guidelin on routine health data quality assessmt/assurance	*	*	*
Region conducts data qualit assessments at health facilities	*	*	*
Region uses data quality asessment tools (e.g., lot quality assurance smpling [LQAS], routine data quality assessmnt [RDQA], in-built electronic data quality vidation rules/system)	*	*	*
Region maintains a record of ealth facility data quality assessments cducted in the past 12 months	*	*	*
Region maintains a record ofeedback to health facilities on data qualty assessment findings	*	*	*

* not collected during this EN-MINI-PRISM Tools pilot assessment

Table 3B.3 Evidence of data analysis—Regional Level

Evidence of data analysis taking place

Indicator: Average score for level of data analysis practice

$$\frac{\text{Sum of the site's score for carrying out data analysis}}{\text{Total \# of sites assessed x 8}} \text{ X } 100$$

Data Source—Module Iia: RHIS Performance Diagnostic Tool (Region Level)			
Indicator	**Numerator**	**Denominator**	**%**
AVERAGE SCORE FOR DA ANALYSIS PRACTICE	*	*	*
DATA AGGREGATION	*	*	*
DEMOGRAPHIC DATA FO CATCHMENT AREA (CE)	*	*	*
CALCULATE COVERAGE IDICATORS FOR EACH CATCHMENT AREA	*	*	*
COMPARISON BY DISTRI	*	*	*
COMPARISON WITH REGINS AND REGIONAL TARGETS	*	*	*
COMPARISON OF DATA OER TIME	*	*	*
COMPARISON OF SEX DIGREGATION	*	*	*
COMPARISON OF SERVICCOVERAGE	*	*	*

* not collected during this EN-MNI -PRISM Tools pilot assessment

Table 3B.4 Data visualization—Regional Level

Data visualization

Indicator: % of sites assessed that are using raw RHIS data to produce data visuals

$$\frac{\text{Total \# of sites assessed that are using raw RHIS data to produce data visuals}}{\text{Total \# of sites assessed}} \text{ X } 100$$

Data Source—Module IIa: RHIS Performance Diagnostic Tool (Region Level)			
Indicator	**Numerator**	**Denominator**	
Region office prepares data isuals showing achievements toward target	*	*	*

* not collected during this EN-MNI -PRISM Tools pilot assessment

Table 3B.5 Feedback mechanisms in place—Regional Level

Feedback mechanism in place

Indicator: % of regions assessed providing written feedback to the lower level based on reported RHIS data

$$\frac{\text{Total \# of regions providing written feedback to lower level based on reported RHIS data}}{\text{Total \# of sites assessed}} \times 100$$

Data Source—Module IIa: RHIS Performance Diagnostic Tool (Region Level)			
Indicator	**Numerator**	**Denominator**	
Region sent feedback repors using RHIS information to health facilitie in the last 3 months	*	*	*

* not collected during this EN-MNI -PRISM Tools pilot assessment

3C. Data Management Indicators—District Level

Section 3C. Tables: Data Management Indicators—District Level

C. RHIS Performance: Data Management Indicators- District Level

Table 3C.1 Data quality assurance in place—average score for data quality control

Data quality assurance in place

Indicator: Average score for data quality control standards in place

$$\frac{\text{Sum of the site's data quality control score}}{\text{Total \# of sites assessed x 8}} \times 100$$

Data Source—Module IIa: RHIS Performance Diagnostic Tool (District Level)			
Indicato	**Numerato**	**Denominator**	
Site data quality score	6	48	13%

Table 3C.2 Data quality assurance in place—individual scores for indicators

Indicator: Individual scores for indicators related to data quality control standards in place

$$\frac{\text{Total \# of districts assessed with data quality control standards in place}}{\text{Total \# of districts assessed}} \times 100$$

Data Source—Module IIa: RHIS Performance Diagnostic Tool (District Level)			
Indicato	**Numerato**	**Denominator**	
District has a designated peron to review the quality of compiled datior to submission to the next lev	6	6	100%
District has written guidelis for data review and quality control	0	6	0%
Designated staff are trainen data review and quality control	0	6	0%
District has written guidelis on routine health data quality assessent/assurance	0	6	0%
District conducts data qualty assessments at health facilities	0	6	0%
District uses data quality asessment tools (e.g., lot quality assuranceampling [LQAS], routine data quality assessent [RDQA], in-built electronic data quality alidation rules/system)?	0	6	0%
District maintains a record health facility data quality assessments cducted in the past 12 months	0	6	0%
District maintains a record o feedback to health facilities on data qualty assessment findings	0	6	0%

Table 3C.3 Evidence of data analysis taking place

Evidence of data analysis taking place

Indicator: Average score for level of data analysis practice

$$\frac{\text{Sum of the site's score for carrying out data analysis}}{\text{Total \# of sites assessed x 8}} \times 100$$

Data Source—Module IIa: RHIS Performance Diagnostic Tool (District Level)			
Indicato	**Numerato**	**Denominator**	
Average score for data anaysis practice	32	48	67%
Data aggregation	6	6	100%
Demographic data for catcent areas	5	6	83%
Calculate coverage indicats for each catchment area	6	6	100%
Comparison by regions or istricts	2	6	33%
Comparison with regions andistrict targets	1	6	17%
Comparison of data over tie	5	6	83%
Comparison of sex disaggration	5	6	83%
Comparison of service covage	2	6	33%

Table 3C.4 Data visualization

Data visualization

Indicator: % of sitthat are using raw RHIS data to produce data visuals

$$\frac{\text{Total \# of sites that arsing raw RHIS data to produce data visuals}}{\text{Total \# of sites assesed}} \times 100$$

Data Source—Module IIa: RHIS Performance Diagnostic Tool (District Level)			
Indicato	**Numerato**	**Denominator**	
District office prepares datvisuals showing achievements toward targes	6	6	100%

Table 3C.5 Feedback mechanism in place

Feedback mechanism in place

Indicator: % of districts providing written feedback to the lower level based on reported RHIS data

$$\frac{\text{Total \# of districts providing written feedback to lower level based on reported RHIS data}}{\text{Total \# of sites assessed}} \times 100$$

Data Source—Module IIa: RHIS Performance Diagnostic Tool (District Level)			
Indicato	**Numerato**	**Denominator**	
District sent feedback repors using RHIS information to health facilitis in the last 3 months	0	6	0%

3D. Data Management Indicators—Facility Level

Section 3D. Tables: Data Management Indicators—Facility Level

D. RHIS Performance: Data Management Indicators- Facility Level

Table 3D.1 Data quality assurance in place—average score for data quality

Data quality assurance in place

Indicator: Average score for data quality control standards in place

$$\frac{\text{Sum of the site's data quality control score}}{\text{Total \# of sites assessed x 7}} \times 100$$

Data Source—Module IIb: RHIS Performance Diagnostic Tool (HF Level)			
Indicato	**Numerator**	**Denominator**	
Site data quality score	19	147	13%

Table 3D.2 Data quality assurance in place—individual scores

Indicator: Individual scores for indicators related to data quality control standards in place

$$\frac{\text{Total \# of facilities with data quality control standards in place}}{\text{Total \# of facilities assessed}} \times 100$$

Data Source—Module IIb: RHIS Performance Diagnostic Tool (HF Level)			
Indicato	**Numerator**	**Denominator**	
Facility has designated person to reviewhe quality of compiled data prior to submission to the next level	13	21	62%
Staff trained in data quality review or da quality check	2	21	10%
Facility has written instructions/guideli on how to perform a data quality review or data quality check	0	21	0%
Facility conducts regular data accuracy hecks (data quality self-assessment)	4	21	19%
Facility has access to data quality self-asessment tools (paper or electronic)	0	21	0%
Facility maintains a record of health faclity data accuracy self-assessments conducted in the past threonths	0	21	0%
Facility maintains records of feedback ttaff on data quality self-assessment findings	0	21	0%

Table 3D.3 Evidence of data analysis taking place at site

Evidence of data analysis taking place

Indicator: Average score for level of data analysis practice

$$\frac{\text{Sum of the site's score for carrying out data analysis}}{\text{Total \# of sites assessed x 7}} \times 100$$

Data Source—Module IIb: RHIS Performance Diagnostic Tool (HF Level)			
Indicato	**Numerator**	**Denominator**	
Site data analysis score	59	147	40%
Data aggregation	21	21	100%
Demographic data for catchment areas	8	21	38%
Calculate coverage indicators for each cchment area	15	21	71%
Comparison with regions and district tarts	1	21	5%
Comparison of data over time	3	21	14%
Sex disaggregation	8	21	38%
Service coverage	3	21	14%

Table 3D.4 Data visualization

Data visualization

Indicator: % of sites that are using raw RHIS data to produce data visuals

$$\frac{\text{Total \# of sites that are using raw RHIS data to produce data visuals}}{\text{Total \# of sites assessed}} \times 100$$

Data Source—Module IIb: RHIS Performance Diagnostic Tool (HF Level)			
Indicatr	**Numerato**	**Denominatr**	**%**
Health facility prepares data visualshowing achievements toward targets	8	21	38%

Table 3D.5 Feedback mechanism in place

Feedback mechanism in place

Indicator: % of facilities confirming receiving feedback on the reported RHIS data from the district or higher level

$$\frac{\text{Total \# of facilities confirmed receiving feedback on reported RHIS data from district or higher level}}{\text{Total \# of sites assessed}} \times 100$$

Data Source—Module IIb: RHIS Performance Diagnostic Tool (HF Level)			
Indicato	**Numerator**	**Denominator**	
Health facility received feedback reportsrom the district office/MOH based on RHIS information in the last 3onths	0	21	0%

3E. Summary of Data Management Indicators

		Central			Regional			District			Facility		
Domain	**Indicator**	**Numerato**	**Denominator**	**%**	**Numerato**	**Denominator**	**%**	**Numerato**	**Denominator**	**%**	**Numerator**	**Denominator**	**%**
Data quality assurance in place	Designated person to review the quality of compiled data prior to submission to the nex level	*	*	*	*	*	*	6	6	100%	13	21	62%
	Written guidelines for data review and qualit control	*	*	*	*	*	*	0	6	0%	2	21	10%
	Designated staff are trained on data review and quality control	*	*	*	*	*	*	0	6	0%	0	21	0%
	Written guidelines on routine health data qualty assessment/assuranc	*	*	*	*	*	*	0	6	0%	4	21	19%
	Conducts data quality assessments at health facilities	*	*	*	*	*	*	0	6	0%	0	21	0%
	Uses data quality assessment tools (e.g. lot quality assurance sampling [LQAS], routne data quality assessmt [RDQA], in-built electronic data quality validation rules/system	*	*	*	*	*	*	0	6	0%	0	21	0%
	Maintains a record of health facility data qualty assessments conduct in the past 12 months	*	*	*	*	*	*	0	6	0%	0	21	0%
	Maintains a record of feedback to health facilities on data qualit assessment findings	*	*	*	*	*	*	0	6	0%	0	0	0%
	Mean score for data quality control standards in place	*	*	*	*	*	*	6	48	**13%**	19	147	**13%**
Evidence	Data aggregation	*	*	*	*	*	*	6	6	100%	21	21	100

		Central			Regional			District			Facility		
Domain	**Indicator**	**Numerato**	**Denominator**	**%**	**Numerato**	**Denominator**	**%**	**Numerato**	**Denominator**	**%**	**Numerator**	**Denominator**	**%**
of data analysis taking place													%
	Demographic data for catchment area (ce)	*	*	*	*	*	*	5	6	83%	8	21	38%
	Calculate coverage indicators for each catchment area	*	*	*	*	*	*	6	6	100%	15	21	71%
	Comparison by regions	*	*	*	*	*	*	2	6	33%			
	Comparison with regions and central targets	*	*	*	*	*	*	1	6	17%	1	21	5%
	Comparison of data over time	*	*	*	*	*	*	5	6	83%	3	21	14%
	Comparison of sex disaggregation	*	*	*	*	*	*	5	6	83%	8	21	38%
	Comparison of service coverage	*	*	*	*	*	*	2	6	33%	3	21	14%
	Average score for level of data analysis practice	*	*	*	*	*	*	32	48	**67%**	59	147	**40%**
	Indicator	**Numerato**	**Denominator**	**%**	**Numerato**	**Denominator**	**%**	**Numerato**	**Denominator**	**%**	**Numerator**	**Denominator**	**%**
Data Visualization	Prepares data visuals showing achievements toward targets	*	*	*	*	*	*	6	6	100%	8	21	38%
	Indicator	**Numerato**	**Denominator**	**%**	**Numerato**	**Denominator**	**%**	**Numerato**	**Denominator**	**%**	**Numerator**	**Denominator**	**%**
Feedback mechanism in place	Sent feedback reports using RHIS information to health facilities in the past 3 months	*	*	*	*	*	*	0	6	0%	0	21	0%

4. RHIS Performance Determinants—Technical Factors

4A. Technical Factors—Central Level

Section 4A. Tables: Technical Factors—Central Level

A. RHIS Performance Determinants: Technical Factors—Central Level

Table 4A.1 Existing information system overlaps and distinction

Existing information system overlaps and distinction **Indicator: Linkage or overlap of existing RHIS**	
Data Source—Module I: Overview Tool	
Indicators	**Facility**
Number of different names of reports generated by community/health facility/district	*
Paper, electronic, or both	*
Type of electronic tool (e.g., Excel, Access, DHIS2)	*
Number of different recipients of reports generated by community/health facility/district	*

* not collected during this EN-MINI-PRISM Tools pilot assessment

Table 4A.2 Standardization of RHIS tools—number and type parallel reports

Standardization of RHIS tools **Indicator: Number and type of parallel reports that are produced at each level of the health system**		
Data Source—Module I: Overview Tool		
Indicators		**Facility**
Number of different names of reports generated by community/health facility/district		*
Type of data reported	Maternal health services—Labour and delivery	*
	Maternal health services—Operation theatre	*
	Maternal health services—Postnatal ward	*
	Child health services—Postnatal ward	*
	Child health services—Kangaroo mother care ward/corner	*
	Child health services—Neonatal inpatient care ward	*
	Child health services—Special care newborn ward	*
	Child health services—Intensive care newborn ward	*
	Other (specify)	*

* not collected during this EN-MINI-PRISM Tools pilot assessment

Table 4A.3 Standardization of RHIS tools—number and type of report recipient

Indicator: Number and type of report recipient		
Data Source—Module I: Overview Tool		
Indicatos		**Facility**
Organization that introduced the report generated by community/health facility/district	MOH (standardized national HIS tool)	*
	MOH (program—specific name)	*
	UN agency (name)	*
	Regional/state government	*
	Other partner/donor (name)	*
	Locally customized/developed	*
	Other (specify)	*
Organization that introduced the paper-based data recording tools	MOH (standardized national HIS tool)	*
	MOH (program—specific name)	*
	UN agency (name)	*
	Regional/state government	*
	Other partner/donor (name)	*
	Locally customized/developed	*
	Other (specify)	*
Organization that introduced the electronic data recording tools	MOH (standardized national HIS tool)	*
	MOH (program—specific name)	*
	UN agency (name)	*
	Regional/state government	*
	Other partner/donor (name)	*
	Locally customized/developed	*
	Other (specify)	*

* not collected during this EN-MINI-PRISM Tools pilot assessment

RHIS SOFTWARE FUNCTIONALITY (ONLY FOR CENTRAL LEVEL)

Table 4A.4 eRHIS reporting capability

eRHIS reporting capability **Indicator: eRHIS allows for the tracking of reporting completeness and timeliness**		
Data Source—Module III: eRHIS Assessment Tool		
Indicators	**Value (0 or 1)**	**Outcome**
RHIS software allows users to determine the number and percentage of monthly reports received of a total number of expected reports	1	YES
System allows users to analyze the trend in reporting completeness for a year by facility	1	YES
System allows users to determine the number and percentage of reports which were received on time	1	YES

Table 4A.5 eRHIS generating a summary report by administrative levels

Indicator: eRHIS genating a summary report by administrative levels				
Data Source—Module III: eRHIS Assessment Tool				
Indicator			**Value (0 or 1)**	**Outcome**
RHIS software generates summary reports	**Monthly**	Nationa	*	*
		Region	*	*
		District	*	*
		Health fility	*	*
		Commuty -level SPD	*	*
	Quarterl	Nationa	*	*
		Region	*	*
		District	*	*
		Health Fility	*	*
		Commuty -level SDP	*	*
	Annual	Nationa	*	*
		Region	*	*
		District	*	*
		Health Fility	*	*
		Commuty -level SDP	*	*
	Customizd reporting peiod	Nationa	*	*
		Region	*	*
		District	*	*
		Health Fility	*	*
		Commuty -level SDP	*	*

Table 4A.6 Population estimates and coverage

Population estimates and coverage **Indicator: eRHIS enables the calculation of serce coverage by administrative levels**			
Data Source—Moule III: eRHIS Assessment Tool			
Indicator		**Value (0 or 1)**	**Outcome**
Level at which RHIS software has population estimates to calculate denominators	Region	*	*
	District	*	*
	Facility	*	*
	Commuty -level SDP	*	*

Table 4A.7 System capturing age and sex disaggregated data

System capturing age and sex disaggregat data **Indicator: eRHIS capturing data disaggregatd by age group**		
Data Source—Moule III: eRHIS Assessment Tool		
Indicato	**Value (0 or 1)**	**Outcome**
RHIS software captures data disaggregated by	*	*

Table 4A.8 eRHIS capturing data disaggregated by sex

Indicator: eRHIS capturing data disaggregat by sex		
Data Source—Moule III: eRHIS Assessment Tool		
Indicato	**Value (0 or 1)**	**Outcome**
RHIS software captures data disaggregated byex	*	*

Table 4A.9 Data integration and interoperability—eRHIS with other systems

Data integration and interoperability **Indicator: Interoperability of eRHIS with othe disease or program -specific parallel systems**		
Data Source—Moule III: eRHIS Assessment Tool		
Indicato	**Value (0 or 1)**	**utcome**
RHIS software interoperates with parallel diseas program -specific software applications in use	*	*

Table 4A.10 Data integration and interoperability—eRHIS with other systems—details

Indicator: Integration or interoperability of eRIS with other program specified/parallel electronic information systems		
Data Source—Moule III: eRHIS Assessment Tool		
Indicators	**Value (0 or 1)**	**Outcome**
RHIS software has human resources informati integrates with a human resource information system	*	*
RHIS software has or integrates with logistics infmation	*	*
RHIS software has financial information	*	*
RHIS software has or integrates with integrated sease surveillance and response (IDSR)	*	*

Table 4A.11 Unique identifiers and master facility list

Unique identifiers and master facility list **Indicator: Availability of unique facility aistrict identifiers**		
Data Source Module III: eRHIS Assessment Tool		
Indicator	**Value (0 or 1)**	**utcome**
RHIS software uses unique identifiers for ditricts and regions	*	*

Table 4A.12 Unique identifiers and master facility list—eRHIS using geographical coordinates

Indicator: eRHIS using master facility list with geographical coordinates			
Data Source—Modle III: eRHIS Assessment Tool			
Indicator		**alue (or 1)**	**Outcome**
Health facilities have geographic coordinates attached to them	None	*	*
	1–25%	*	*
	26–50	*	*
	51–75	*	*
	76–10	*	*

Table 4A.13 Unique identifiers and master facility list—use by other programs

Indicator: Use of unique facility and ditrict identifiers by other programs		
Data Source Module III: eRHIS Assessment Tool		
Indicator	**Value (0 or 1)**	**utcome**
A framework or agreement is in place such tat those unique identifier lists are available for general use by other progrms	*	*

Table 4A.14 Data analysis—eRHIS generate top causes of morbidity and mortality by administrative levels

Data analysis **Indicator: Capility of eRHIS to generate top causes of morbidity and mortality by administrative levels**		
Data Source—Module III: eRHIS Assessment Tool		
Indicators	**Value (0 or 1)**	**Outcome**
RHIS softwarenerates the major causes of institution -based (inpatient, emergency) natal mortality (preterm, birth asphyxia, sepsis)	*	*
RHIS softwarenerates the major morbidity diagnoses for inpatient and outpatient servces (e.g., top ten diseases: retinopathy, growth faltering, kernicterus, jndice)	*	*

Table 4A.15 Data visualization—eRHIS presents data in graphs, charts, and tables

Data visualization **Indicator: eRHIS software allows user to present da in graphs, charts, and tables**			
Data Source—Module eRHIS Assessment Tool			
Indicators		**alue (or 1)**	**Outcome**
RHIS software generates tabular data arranged in listing format	Indicator 1	*	*
	Indicator 2	*	*
	Indicator 3	*	*
RHIS software allows users to present data in time trend graphs	Indicator 1	*	*
	Indicator 2	*	*
	Indicator 3	*	*
RHIS software allows users to visualize data usin graphs for comparing facilities/districts/regions	Indicator 1	*	*
	Indicator 2	*	*
	Indicator 3	*	*

Table 4A.16 Data visualization—eRHIS presents data using thematic maps

Indicator: eRHIS software allows user to visualize data using thematic maps			
Data Source—Moule III: eRHIS Assessment Tool			
Indicator		**nral**	**Outcome**
RHIS software allows users to visualize data using thematic maps	Region	*	*
	District	*	*
	Facilit	*	*
	Commnity -level SDP	*	*

Central Level RHIS—Software Usability Tables

RHIS SOFTWARE USABILITY

Table 4A.17 RHIS reporting capability—track completeness using eRHIS

RHIS reporting capability
Indicator: % of staff able to track report completeness using eRHIS

$$\frac{\text{Total \# of staff able to track report completeness using RHIS}}{\text{Total \# of sites assessed}} \times 100$$

Data Source—Module III: eRHIS Assessment Tool			
Indicator	**Numerator**	**Denominator**	**%**
User can carry out the following function: RHIS software produces a report on the number and percentage of reports received of the total number of expected reports	*	*	*

* not collected during this EN-MINI-PRISM Tools pilot assessment

Table 4A.18 RHIS reporting capability—generate summary reports using eRHIS

Indicator: % of staff demonstrating capacity to generate summary reports using eRHIS

$$\frac{\text{Total \# of staff demonstrating capacity to generate summary reports using eRHIS}}{\text{Total \# of sites assessed}} \times 100$$

Data Source—Module III: eRHIS Assessment Tool					
Indicators			**Numerator**	**Denominator**	**%**
User can carry out the following function: RHIS software generates summary reports for aggregate levels and time periods	National/regional summary	Monthly	*	*	*
		Quarterly	*	*	*
		Annually	*	*	*
	District summary	Monthly	*	*	*
		Quarterly	*	*	*
		Annually	*	*	*
	Health facility summary	Monthly	*	*	*
		Quarterly	*	*	*
		Annually	*	*	*
	Community-level SDP summary	Monthly	*	*	*
		Quarterly	*	*	*
		Annually	*	*	*

* not collected during this EN-MINI-PRISM Tools pilot assessment

Table 4A.19 Ability to calculate coverage indicators with eRHIS

Ability to calculate coverage indicators

Indicator: % of staff able to calculate coverage indicators using eRHIS

$$\frac{\text{Total \# of staff able to calculate coverage indicators using eRHIS}}{\text{Total \# of respondents in sites assessed}} \times 100$$

Data Source—Module III: eRHIS Assessment Tool					
Indicators			**Numerator**	**Denominator**	**%**
User can calculate coverage for	Indicator 1	National	*	*	*
		Region	*	*	*
		District	*	*	*
		Health facility	*	*	*
		Community-level SDP	*	*	*
	Indicator 2	National	*	*	*
		Region	*	*	*
		District	*	*	*
		Health facility	*	*	*
		Community-level SDP	*	*	*
	Indicator 3	National	*	*	*
		Region	*	*	*
		District	*	*	*
		Health facility	*	*	*
		Community-level SDP	*	*	*

* not collected during this EN-MINI-PRISM Tools pilot assessment

Table 4A.20 Data analysis features eRHIS used

Data analysis

Indicator: % of staff demonstrating the use of data analysis features of the eRHIS

$$\frac{\text{Total \# of staff demonstrating the use of data analysis features of the eRHIS}}{\text{Total \# of respondents in sites assessed}} \times 100$$

Data Source—Module III: eRHIS Assessment Tool			
Indicators	**Numerator**	**Denominator**	**%**
User can generate major causes of institution-based (in-patient, emergency) mortality (e.g., preterm birth, birth asphyxia, sepsis)	*	*	*
User can generate major morbidity diagnoses for inpatient and outpatient services (e.g., top ten diseases)? (e.g., retinopathy, growth faltering, kernicterus, jaundice)	*	*	*

* not collected during this EN-MINI-PRISM Tools pilot assessment

Table 4A.21 Data visualization—eRHIS present data in graphs and maps

Data visualization
Indicator: % of staff able to use the data visualization features of the eRHIS to analyze and present data in graphs and maps

$$\frac{\text{Total \# of staff able to use data visualization features to analyze and present data}}{\text{Total \# of sites assessed}} \times 100$$

Data Source—Module III: eRHIS Assessment Tool					
Indicators			**Numerator**	**Denominator**	**%**
User can generate	Indicator 1	Time trend graphs	*	*	*
		Bar graphs for comparing facilities, districts, or regions	*	*	*
		Thematic maps, by region, district, or health facility	*	*	*
	Indicator 2	Time trend graphs	*	*	*
		Bar graphs for comparing facilities, districts, or regions	*	*	*
		Thematic maps, by region, district, or health facility	*	*	*

* not collected during this EN-MINI-PRISM Tools pilot assessment

4B. Technical Factors—Regional Level

Section 4B. Tables: Technical Factors—Regional Level

B. RHIS Performance Determinants: Technical Factors- Regional Level

Table 4B.1 Existing information system overlaps and distinction

RHIS Performance Determinants: Technical Factors ***Existing information system overlaps and distinction*** **Indicator: Linkage or overlap of existing RHIS**	
Data Source—Module I: Overview Tool	
Indicators	**Facility**
Number of different names of reports generated by community/health facility/district	*
Paper, electronic, or both	*
Type of electronic tool (e.g., Excel, Access, DHIS2)	*
Number of different recipients of reports generated by community/health facility/district	*

* not collected during this EN-MINI-PRISM Tools pilot assessment

Table 4B.2 Standardization of RHIS tools—number and type parallel reports

Standardization ofHIS tools **Indicator: Number d type of parallel reports that are produced at each level of the health system**		
Data Source—Module I: Overview Tool		
Indicators		**cility**
Number of different nam of reports generated by community/health facility/distric		*
Type of data reported	Maternal health services—Labour and delivery	*
	Maternal health services—Operation theatre	*
	Maternal health services—Postnatal ward	*
	Child health services—Postnatal ward	*
	Child health services—Kangaroo mother care ward/corner	*
	Child health services—Neonatal inpatient careard	*
	Child health services—Special care newborn wd	*
	Child health services—Intensive care newbornard	*
	Other (specify)	*

Table 4B.3 Standardization of RHIS tools—number and type of report recipient

Indicator: Number and type f report recipient		
Data Source—Module I: Overview Tool		
Indicators		**cility**
Organization that introduced the report generated by community/health facility/ district	MOH (standardized national HIS tool)	*
	MOH (program—specific name)	*
	UN agency (name)	*
	Regional/state government	*
	Other partner/donor (name)	*
	Locally customized/developed	*
	Other (specify)	*
Organization that introduced the paper-based data recording tools	MOH (standardized national HIS tool)	*
	MOH (program—specific name)	*
	UN agency (name)	*
	Regional/state government	*
	Other partner/donor (name)	*
	Locally customized/developed	*
	Other (specify)	*
Organization that introduced the electronic data recording tools	MOH (standardized national HIS tool)	*
	MOH (program—specific name)	*
	UN agency (name)	*
	Regional/state government	*
	Other partner/donor (name)	*
	Locally customized/developed	*
	Other (specify)	*

* not collected during this EN-MINI-PRISM Tools pilot assessment

Table 4B.4 RHIS reporting capability—track completeness using eRHIS

RHIS reporting capability **Indicator: % of staff able to track report completeness using eRHIS** Total # of staff able to track report completeness using RHIS / Total # of sites assessed X 100		
Data Source—Module III: eRHIS Assessment Tool		
Indicator	Numerator	Denominator
User can carry out the following function: RHIS software produces a report on the number and percentage of reports received of the total number of expected reports	*	*

* not collected during this EN-MINI-PRISM Tools pilot assessment

Table 4B.5 RHIS reporting capability—generate summary reports using eRHIS

Indicator: % of staff demonstrating capacity to generate summary reports using eRHIS Total # of staff demonstrating capacity to generate summary reports using eRHIS / Total # of respondents X 100					
Data Source—Module III: eRHIS Assessment Tool					
Indicators			**Numerator**	**Denominator**	**%**
User can carry out the following function: RHIS software generates summary reports for aggregate levels and time periods	Region summary	Monthly	*	*	*
		Quarterly	*	*	*
		Annually	*	*	*
	Health facility summary	Monthly	*	*	*
		Quarterly	*	*	*
		Annually	*	*	*
	Community-level SDP summary	Monthly	*	*	*
		Quarterly	*	*	*
		Annually	*	*	*

* not collected during this EN-MINI-PRISM Tools pilot assessment

Table 4B.6 Ability to calculate coverage indicators with eRHIS

Ability to calculate coverage indicators

Indicator: % of staff able to calculate coverage indicators using eRHIS

$$\frac{\text{Total \# of staff able to calculate coverage indicators using eRHIS}}{\text{Total \# of sites assessed}} \times 100$$

Data Source—Module III: eRHIS Assessment Tool

			Region		
Indicators			**Numerator**	**Denominator**	**%**
User can calculate coverage for	Indicator 1	National	*	*	*
		Region	*	*	*
		Region	*	*	*
		Health facility	*	*	*
		Community-level SDP	*	*	*
	Indicator 2	National	*	*	*
		Region	*	*	*
		Region	*	*	*
		Health facility	*	*	*
		Community-level SDP	*	*	*
	Indicator 3	National	*	*	*
		Region	*	*	*
		Region	*	*	*
		Health facility	*	*	*
		Community-level SDP	*	*	*

* not collected during this EN-MINI-PRISM Tools pilot assessment

Table 4B.7 Data analysis features eRHIS used

Data analysis

Indicator: % of staff demonstrating the use of data analysis features of the eRHIS

$$\frac{\text{Total \# of staff demonstrating the use of data analysis features of the eRHIS}}{\text{Total \# of sites assessed}} \times 100$$

Data Source—Module III: eRHIS Assessment Tool

Indicators	**Numerator**	**Denominator**	**%**
User can generate major causes of institution-based (in-patient, emergency) mortality (e.g., preterm birth, birth asphyxia, sepsis)	*	*	*
User can generate major morbidity diagnoses for inpatient and outpatient services (e.g., top ten diseases)? (e.g., retinopathy, growth faltering, kernicterus, jaundice)	*	*	*

* not collected during this EN-MINI-PRISM Tools pilot assessment

Table 4B.8 Data visualization—eRHIS present data in graphs and maps

Data visualization

Indicator: % of staff able to use the data visualization features of the eRHIS to analyze and present data in graphs and maps

$$\frac{\text{Total \# of staff able to use the data visualization features to analyze and present data}}{\text{Total \# of sites assessed}} \times 100$$

Data Source—Module III: eRHIS Assessment Tool					
Indicators			**Numerator**	**Denominator**	**%**
User can generate	Indicator 1	Time trend graphs	*	*	*
		Bar graphs for comparing facilities, regions, or regions	*	*	*
		Thematic maps, by region, region, or health facility	*	*	*
	Indicator 2	Time trend graphs	*	*	*
		Bar graphs for comparing facilities, regions, or regions	*	*	*
		Thematic maps, by region, region, or health facility	*	*	*

* not collected during this EN-MINI-PRISM Tools pilot assessment

4C. Technical Factors—District Level

Section 4C. Tables: Technical Factors—District Level

C. RHIS Performance Determinants: Technical Factors- District Level

Table 4C.1 Existing information system overlaps and distinction

I. RHIS Performance Determinants: Technical Factors ***Existing information system overlaps and distinction*** **Indicator: Linkage or overlap of existing RHIS**	
Data Source—Module I: Overview Tool	
Indicators	**Value**
Number of different names of reports generated by community/health facility/district	10
Paper, electronic, or both	10
Type of electronic tool (e.g., Excel, Access, DHIS2)	10
Number of different recipients of reports generated by community/health facility/district	10

Table 4C.2 Standardization of RHIS tools—number and type parallel reports

Standardization of RHIS tools **Indicator: Number and type of parallel reports that are produced at each level of the health system**		
Data Source—Module I: Overview Tool		
Indicators		**District**
Number of different names of reports generated by community/health facility/district		10
Type of data reported	Maternal health services—Labour and delivery	5
	Maternal health services—Operation theatre	0
	Maternal health services—Postnatal ward	0
	Child health services—Postnatal ward	0
	Child health services—Kangaroo mother care ward/corner	0
	Child health services—Neonatal inpatient care ward	0
	Child health services—Special care newborn ward	0
	Child health services—Intensive care newborn ward	0
	Other (specify)	0

Table 4C.3 Standardization of RHIS tools—number and type of report recipient

Indicator: Number and type of report recipient		
Data Source—Module I: Overview Tool		
Indicators		**Facility**
Organization that introduced the report generated by community/ health facility/ district	MOH (standardized national HIS tool)	5
	MOH (program—specific name)	5
	UN agency (name)	0
	Regional/state government	0
	Other partner/donor (name)	0
	Locally customized/developed	0
	Other (specify)	0
Organization that introduced the paper-based data recording tools	MOH (standardized national HIS tool)	5
	MOH (program—specific name)	5
	UN agency (name)	0
	Regional/state government	0
	Other partner/donor (name)	0
	Locally customized/developed	0
	Other (specify)	0
Organization that introduced the electronic data recording tools	MOH (standardized national HIS tool)	0
	MOH (program—specific name)	0
	UN agency (name)	0
	Regional/state government	0
	Other partner/donor (name)	0
	Locally customized/developed	0
	Other (specify)	0

Table 4C.4 RHIS reporting capability—track completeness using eRHIS

RHIS reporting capability **Indicator: % of staff able to track report completeness using eRHIS** Total # of staff able to track report completeness using RHIS / Total # of sites assessed X 100			
Data Source—Module III: eRHIS Assessment Tool			
Indicator	**Numerator**	**Denominator**	**%**
User can carry out the following function: RHIS software produces a report on the number and percentage of reports received out of the total number of expected reports	*	*	*

* not collected during this EN-MINI-PRISM Tools pilot assessment

Table 4C.5 RHIS reporting capability—generate summary reports using eRHIS

Indicator: % of staff demonstrating capacity to generate summary reports using eRHIS Total # of staff demonstrating capacity to generate summary reports using eRHIS / Total # of respondents X 100					
Data Source—Module III: eRHIS Assessment Tool					
Indicators			**Numerator**	**Denominator**	**%**
User can carry out the following function: RHIS software generates summary reports for aggregate levels and time periods	District summary	Monthly	*	*	*
		Quarterly	*	*	*
		Annually	*	*	*
	Health facility summary	Monthly	*	*	*
		Quarterly	*	*	*
		Annually	*	*	*
	Community-level SDP summary	Monthly	*	*	*
		Quarterly	*	*	*
		Annually	*	*	*

* not collected during this EN-MINI-PRISM Tools pilot assessment

Table 4C.6 Ability to calculate coverage indicators with eRHIS

Ability to calculate coverage indicators

Indicator: % of staff able to calculate coverage indicators using eRHIS

$$\frac{\text{Total \# of staff able to calculate coverage indicators using eRHIS}}{\text{Total \# of sites assessed}} \times 100$$

Data Source—Module III: eRHIS Assessment Tool					
			District		
Indicators			Numerator	Denominator	%
User can calculate coverage for	Indicator 1	National	*	*	*
		Region	*	*	*
		District	*	*	*
		Health facility	*	*	*
		Community-level SDP	*	*	*
	Indicator 2	National	*	*	*
		Region	*	*	*
		District	*	*	*
		Health facility	*	*	*
		Community-level SDP	*	*	*
	Indicator 3	National	*	*	*
		Region	*	*	*
		District	*	*	*
		Health facility	*	*	*
		Community-level SDP	*	*	*

* not collected during this EN-MINI-PRISM Tools pilot assessment

Table 4C.7 Data analysis features eRHIS used

Data analysis

Indicator: % of staff demonstrating the use of data analysis features of the eRHIS

$$\frac{\text{Total \# of staff demonstrating the use of data analysis features of the eRHIS}}{\text{Total \# of sites assessed}} \times 100$$

Data Source—Module III: eRHIS Assessment Tool			
Indicators	Numerator	Denominator	%
User can generate major causes of institution-based (inpatient, emergency) mortality (e.g., preterm birth, birth asphyxia, sepsis)	*	*	*
User can generate major morbidity diagnoses for inpatient and outpatient services (e.g., top ten diseases)	*	*	*

* not collected during this EN-MINI-PRISM Tools pilot assessment

Table 4C.8 Data visualization—eRHIS present data in graphs and maps

Data visualization

Indicator: % of staff able to use the data visualization features of the eRHIS to analyze and present data in graphs and maps

$$\frac{\text{Total \# of staff able to use data visualization features to analyze and present data}}{\text{Total \# of sites assessed}} \times 100$$

Data Source—Module III: eRHIS Assessment Tool					
Indicators			**Numerator**	**Denominator**	**%**
User can generate	Indicator 1	Time trend graphs	*	*	*
		Bar graphs for comparing facilities, districts, or regions	*	*	*
		Thematic maps, by region, district, or health facility	*	*	*
	Indicator 2	Time trend graphs	*	*	*
		Bar graphs for comparing facilities, districts, or regions	*	*	*
		Thematic maps, by region, district, or health facility	*	*	*

* not collected during this EN-MINI-PRISM Tools pilot assessment

Section 4D. Tables: Technical Factors—Facility Level

D. RHIS Performance Determinants: Technical Factors—Facility Level

Table 4D.1 Existing information system overlaps and distinction

Existing information system overlaps and distinction

Indicator: Linkage or overlap of existing RHIS

Data Source—Module I: Overview Tool	
Indicators	**Value**
Number of different names of reports generated by community/health facility/district	42
Paper, electronic, or both	42
Type of electronic tool (e.g., Excel, Access, DHIS2)	0
Number of different recipients of reports generated by community/health facility/district	42

Table 4D.2 Standardization of RHIS tools—number and type parallel reports

Standardization of RHIS tools

Indicator: Number and type of parallel reports that are produced at each level of the health system

Data Source—Module I: Overview Tool		
Indicators		**Facility**
Number of different names of reports generated by community/health facility/district		42
Type of data reported	Maternal health services—Labour and delivery	12
	Maternal health services—Operation theatre	0
	Maternal health services—Postnatal ward	0
	Child health services—Postnatal ward	0
	Child health services—Kangaroo mother care ward/corner	6
	Child health services—Neonatal inpatient care ward	0
	Child health services—Special care newborn ward	2
	Child health services—Intensive care newborn ward	0
	Other (specify)	22

Table 4D.3 Standardization of RHIS tools—number and type of report recipient

Indicator: Number and type of report recipient		
Data Source—Module I: Overview Tool		
Indicators		**Value**
Organization that introduced the report generated by community/ health facility/ district	MOH (standardized national HIS tool)	0
	MOH (program—specific name)	0
	UN agency (name)	0
	Regional/state government	0
	Other partner/donor (name)	0
	Locally customized/developed	0
	Other (specify)	0
Organization that introduced the paper-based data recording tools	MOH (standardized national HIS tool)	68
	MOH (program—specific name)	0
	UN agency (name)	0
	Regional/state government	0
	Other partner/donor (name)	0
	Locally customized/developed	0
	Other (specify)	0
Organization that introduced the electronic data recording tools	MOH (standardized national HIS tool)	0
	MOH (program—specific name)	0
	UN agency (name)	0
	Regional/state government	0
	Other partner/donor (name)	0
	Locally customized/developed	0
	Other (specify)	0

Table 4D.4 RHIS reporting capability—Track completeness using eRHIS

RHIS reporting capability

Indicator: % of staff able to track report completeness using electronic RHIS (eRHIS)

$$\frac{\text{Total \# of staff able to track report completeness using RHIS}}{\text{Total \# of sites assessed}} \times 100$$

Data Source—Module III: eRHIS Assessment Tool			
Indicator	**Numerator**	**Denominator**	**%**
User can carry out the following function: RHIS software produces a report on the number and percentage of reports received of the total number of expected reports	5	6	83%

Table 4D.5 RHIS reporting capability—Generate summary reports using eRHIS

Indicator: % of staff demonstrating capacity to generate summary reports using eRHIS

$$\frac{\text{Total \# of staff demonstrating capacity to generate summary reports using eRHIS}}{\text{Total \# of respondents}} \times 100$$

Data Source—Module III: eRHIS Assessment Tool					
Indicators			**Numerator**	**Denominator**	**%**
User can carry out the following function: RHIS software generates summary reports for aggregate levels and periods	Health facility summary	Monthly	5	6	83%
		Quarterly	5	6	83%
		Annually	5	6	83%
	Community-level SDP summary	Monthly	4	6	67%
		Quarterly	4	6	67%
		Annually	4	6	67%

Table 4D.6 Ability to calculate coverage indicators with eRHIS

Ability to calculate coverage indicators

Indicator: % of staff able to calculate coverage indicators using eRHIS

$$\frac{\text{Total \# of staff able to calculate coverage indicators using eRHIS}}{\text{Total \# of sites assessed}} \times 100$$

Data Source—Module III: eRHIS Assessment Tool					
Indicators			**Numerator**	**Denominator**	**%**
User can calculate coverage for	Indicator 1	Health facility	5	6	83%
		Community-level SDP	4	6	67%
	Indicator 2	Health facility	5	6	83%
		Community-level SDP	4	6	67%
	Indicator 3	Health facility	5	6	83%
		Community-level SDP	4	6	67%

Table 4D.7 Data analysis features used

Data analysis **Indicator: % of staff demonstrating the use of data analysis features of the eRHIS** Total # of staff demonstrating the use of data analysis features of the eRHIS / Total # of sites assessed X 100			
Data Source—Module III: eRHIS Assessment Tool			
Indicators	**Numerator**	**Denominator**	**%**
User can generate major causes of institution-based mortality	5	6	83%
User can generate major morbidity diagnoses for inpatient and outpatient services	5	6	83%

Table 4D.8 Data visualization—eRHIS present data in graphs and maps

Data visualization **Indicator: % of staff able to use the data visualization features of the eRHIS to analyze and present data in graphs and maps** Total # of staff able to use data visualization features to analyze and present data / Total # of sites assessed X 100

Data Source—Module III: eRHIS Assessment Tool					
Indicators			**Numerator**	**Denominator**	**%**
User can generate	Indicator 1	Time trend graphs	5	6	83%
		Bar graphs for comparing facilities, districts, or regions	5	6	83%
		Thematic maps, by region, district, or health facility	5	6	83%
	Indicator 2	Time trend graphs	5	6	83%
		Bar graphs for comparing facilities, districts, or regions	5	6	83%
		Thematic maps, by region, district, or health facility	5	6	83%

4E. Summary Table for Technical Factors

			Central		Regional		District		Facility	
Domain	**Indicator**		**Number**		**Number**		**Number**		**Number**	
Existing information system overlaps and distinction	Linkage or overlap of existing RHIS	Number of different names of reports generated by community/health facility/district	*		*		10		42	
		Paper, electronic, or both	*		*		10		42	
		Type of electronic tool (e.g., Excel, Access, DHIS2)	*		*		10		0	
		Number of different recipients of reports generated by community/health facility/district	*		*		10		42	
Standardization of RHIS tools	Number and type of parallel reports that are produced at each level of the health system	Number of different names of reports generated by community/health facility/district	*		*		10		42	

		Central			Regional			District			Facility		
Domain	**Indicator**	**Numerator**	**Denominator**	**%**	**Numerator**	**Denominator**	**%**	**Numerator**	**Denominator**	**%**	**Numerator**	**Denominator**	**%**

			Central			Regional			District			Facility		
Domain	**Indicator**		**Numerator**	**Denominator**	**%**	**Numerator**	**Denominator**	**%**	**Numerator**	**Denominator**	**%**	**Numerator**	**Denominator**	**%**
RHIS reporting capability	% of staff able to track report completeness using electronic RHIS (eRHIS)		*	*	*	*	*	*	*	*	*	7	8	88%
	% of staff demonstrating capacity to generate summary reports using eRHIS	Region summary—monthly	*	*	*	*	*	*						
		Region summary—quarterly	*	*	*	*	*	*						
		Region summary—annually	*	*	*	*	*	*						
		District summary—monthly	*	*	*				*	*	*			
		District summary—quarterly	*	*	*				*	*	*			
		District summary—annually	*	*	*				*	*	*			
		Health facility summary—monthly	*	*	*	*	*	*	*	*	*	5	6	83%
		Health facility summary—quarterly	*	*	*	*	*	*	*	*	*	5	6	83%
		Health facility summary—annually	*	*	*	*	*	*	*	*	*	5	6	83%

			Central			Regional			District			Facility		
Domain	**Indicator**		**Numerator**	**Denominator**	**%**	**Numerator**	**Denominator**	**%**	**Numerator**	**Denominator**	**%**	**Numerator**	**Denominator**	**%**
Ability to calculate coverage indicators	% of staff able to calculate coverage indicators using eRHIS	National coverage—indicator 1	*	*	*	*	*	*	*	*	*			
		Regional coverage—indicator 1	*	*	*	*	*	*	*	*	*			
		District coverage—indicator 1	*	*	*	*	*	*	*	*	*			
		Health facility coverage—indicator 1	*	*	*	*	*	*	*	*	*	5	6	83%
		National coverage—indicator 2	*	*	*	*	*	*	*	*	*			
		Regional coverage—indicator 2	*	*	*	*	*	*	*	*	*			
		District coverage—indicator 2	*	*	*	*	*	*	*	*	*			
		Health facility coverage—indicator 2	*	*	*	*	*	*	*	*	*	5	6	83%
		National coverage—indicator 3	*	*	*	*	*	*	*	*	*			
		Regional coverage—indicator 3	*	*	*	*	*	*	*	*	*			
		District coverage—indicator 3	*	*	*	*	*	*	*	*	*			
		Health facility coverage—indicator 3	*	*	*	*	*	*	*	*	*	5	6	83%
Data analysis	% of staff demonstrating the use of data analysis features of the eRHIS	User can generate major causes of institution-based mortality	*	*	*	*	*	*	*	*	*	5	6	83%

			Central			Regional			District			Facility		
Domain	**Indicator**		**Numerator**	**Denominator**	**%**	**Numerator**	**Denominator**	**%**	**Numerator**	**Denominator**	**%**	**Numerator**	**Denominator**	**%**
		User can generate major morbidity diagnoses for inpatient and outpatient services	*	*	*	*	*	*	*	*	*	5	6	83%
Data visualization	% of staff able to use the data visualization features of the eRHIS to analyze and present data in graphs and maps	Time trend graphs—Indicator 1	*	*	*	*	*	*	*	*	*	5	6	83%
		Bar graphs for comparing facilities, districts, or regions—Indicator 1	*	*	*	*	*	*	*	*	*	5	6	83%
		Thematic maps, by region, district, or health facility—Indicator 1	*	*	*	*	*	*	*	*	*	5	6	83%
		Time trend graphs—Indicator 2	*	*	*	*	*	*	*	*	*	5	6	83%
		Bar graphs for comparing facilities, districts, or regions—Indicator 2	*	*	*	*	*	*	*	*	*	5	6	83%

			Central			Regional			District			Facility		
Domain	**Indicator**		**Numerator**	**Denominator**	**%**	**Numerator**	**Denominator**	**%**	**Numerator**	**Denominator**	**%**	**Numerator**	**Denominator**	**%**
		Thematic maps, by region, district, or health facility—Indicator 2	*	*	*	*	*	*	*	*	*	5	6	83%

5. RHIS Performance Determinants—Organizational Factors

5A. Organizational Factors—Central Level

Section 5A. Tables: Organizational Factors—Central Level

A. RHIS Performance Determinants: Organizational Factors—Central Level

Table 5A.1 RHIS Governance—Structures

RHIS governance

Indicator: Good RHIS governance structures in place

$$\frac{\text{Total \# of sites with good RHIS governance structures in place}}{\text{Total \# of sites assessed (=1)}} \times 100$$

Data Source—Module IV: MAT			
Indicators	**Numerator**	**Denominator**	**%**
Has a written document describing the RHIS mission, roles, and responsibilities that are related to strategic and policy decisions at central and higher levels	*	*	*
Has current health service organizational and staff charts showing positions related to health information	*	*	*
Has overall framework and plan for information and communication technology (ICT), (e.g., describing the required equipment and plans for training in the use of ICT for RHIS)	*	*	*
Office maintains documentation of the dissemination of the RHIS monthly/ quarterly reports to the various health program staff at the central level, the community, local administration, NGOs, etc.	*	*	*

* not collected during this EN-MINI-PRISM Tools pilot assessment

Table 5A.2 RHIS Governance—Data management guidelines

Indicator: Existence of RHIS data management guidelines

$$\frac{\text{Total \# of sites with RHIS data management guidelines}}{\text{Total \# of sites assessed (=1)}} \times 100$$

Data Source—Module IV: MAT			
Indicators	**Numerator**	**Denominator**	**%**
Has written SOPs and procedural guidelines for RHIS with data definition, data collection and reporting, data aggregation, processing, and transmission, data analysis, dissemination and use, data quality assurance, MFL, ICD classification, data security, and performance improvement process **(Completely)**	*	*	*
Has written SOPs and procedural guidelines for RHIS with data definition, data collection and reporting, data aggregation, processing, and transmission, data analysis, dissemination and use, data quality assurance, MFL, ICD classification, data security, and performance improvement process **(Partially)**	*	*	*

* not collected during this EN-MINI-PRISM Tools pilot assessment

Table 5A.3 RHIS planning—national documents

RHIS planning

Indicator: % of sites with copies of national HIS documents

$$\frac{\text{Total \# of sites with copies of national HIS documents}}{\text{Total \# of sites assessed (=1)}} \times 100$$

Data Source—Module IV: MAT			
Indicators	**Numerator**	**Denominator**	**%**
Has a copy of the national HIS situation analysis/assessment report that is less than three years old	*	*	*
Has a copy of the national three or five-year HIS strategic plan	*	*	*

* not collected during this EN-MINI-PRISM Tools pilot assessment

Table 5A.4 Use of quality improvement standards

Use of quality improvement standards

Indicator: % of Centrals that have RHIS quality improvement standards

$$\frac{\text{RHIS quality improvement standards}}{\text{Total \# of sites assessed (=1)}} \times 100$$

Data Source—Module IV: MAT			
Indicator	**Numerator**	**Denominator**	**%**
Has set RHIS performance targets RHIS performance targets for data accuracy for their respective administrative areas	*	*	*
Has set RHIS performance targets RHIS performance targets for data completeness for their respective administrative areas	*	*	*
Has set RHIS performance targets RHIS performance targets for data timeliness for their respective administrative areas	*	*	*

* not collected during this EN-MINI-PRISM Tools pilot assessment

Table 5A.5 Supervision quality

Supervision quality

Indicator: Existence effective supportive supervision practices /tools availability to improve RHIS performance

$$\frac{\text{Total \# of sites with documents related to supervision}}{\text{Total \# of sites assessed (=1)}} \times 100$$

Data Source—Module IV: MAT			
	Central		
Indicators	**Numerator**	**Denominator**	**%**
Office has copies of RHIS supervisory guidelines and checklists	*	*	*
Office maintains a schedule for RHIS supervisory visits	*	*	*
Office has copies of the reports from RHIS supervisory visits conducted during the current fiscal year	*	*	*
HFa that received a supervisory visit have copies of the report from latest supervisory visit and commonly agreed action points are listed	*	*	*

* not collected during this EN-MINI-PRISM Tools pilot assessment

Table 5A.6 Financial resources to support RHIS activities

Financial resources to support RHIS activities

Indicator: Existence of financial resource allocation for RHIS activities

$$\frac{\text{Existence of financial resource allocation at central level for RHIS activities}}{\text{Total \# of sites assessed (=1)}} \times 100$$

Data Source—Module IV: MAT			
	Central		
Indicator	**Numerator**	**Denominator**	**%**
Office has a copy of the long-term financial plan for supporting RHIS activities	*	*	*

* not collected during this EN-MINI-PRISM Tools pilot assessment

Table 5A.7 Infrastructure for RHIS data management

Infrastructure for RHIS data management

Indicator: Existence of Internet connectivity at the central level

$$\frac{\text{Existence of Internet connectivity at the central level}}{\text{Total \# of sites assessed (=1)}} \times 100$$

Data Source—Module V: Facility/Office Checklist			
Indicator	**Numerator**	**Denominator**	**%**
Access to an Internet network	*	*	*

* not collected during this EN-MINI-PRISM Tools pilot assessment

Table 5A.8 RHIS supplies for data collection and aggregation—total recording and reporting forms

RHIS supplies for data collection and aggregation

Indicator: Existence of adequate supply of RHIS recording/ reporting forms at the central level

$$\frac{\text{Availability of RHIS recording/ reporting forms at central level}}{\text{Total \# of sites assessed (=1)}} \times 100$$

Data Source: Module 5. Facility/Office Checklist				
Tool Availability	**Tools ID**	**Numerator**	**Denominator**	**%**
Maternal health services				
Maternal health services—Labour and delivery printed register	5.1	*	*	*
Maternal health services—Operation theatre printed register	5.2	*	*	*
Maternal health services—Postnatal ward printed register	5.3	*	*	*
Maternal health services—Printed death register	5.4	*	*	*
Child health services				
Child health services—Postnatal ward printed register	6.1	*	*	*
Child health services—Kangaroo mother care ward/corner printed register	6.2	*	*	*
Child health services—Neonatal inpatient care ward printed register	6.3	*	*	*
Child health services—Special care newborn ward printed register	6.4	*	*	*
Child health services—Intensive care newborn ward printed register	6.5	*	*	*
Child health services—Printed death register	6.6	*	*	*

* not collected during this EN-MINI-PRISM Tools pilot assessment

Table 5A.9 RHIS supplies for data collection and aggregation—standard recording and reporting forms

Indicator: % of sites with an adequate supply of standard RHIS recording and reporting forms	
Total # of standard RHIS tools available at central level office / Total # of sites assessed (=1)	X100

Data Source: Module 5. Facility/Office Checklist				
Standard RHIS tool	**Tools ID**	**Numerator**	**Denominator**	**%**
Maternal health services				
Maternal health services—Labour and delivery printed register	5.1	*	*	*
Maternal health services—Operation theatre printed register	5.2	*	*	*
Maternal health services—Postnatal ward printed register	5.3	*	*	*
Maternal health services—Printed death register	5.4	*	*	*
Child health services				
Child health services—Postnatal ward printed register	6.1	*	*	*
Child health services—Kangaroo mother care ward/corner printed register	6.2	*	*	*
Child health services—Neonatal inpatient care ward printed register	6.3	*	*	*
Child health services—Special care newborn ward printed register	6.4	*	*	*
Child health services—Intensive care newborn ward printed register	6.5	*	*	*
Child health services—Printed death register	6.6	*	*	*

* not collected during this EN-MINI-PRISM Tools pilot assessment

Table 5A.10 Facilities or offices with no stock-outs of recording and reporting tools within the past six months

Indicator: % of facilities or offices with no stock-outs of recording and reporting tools within the past six months

$$\frac{\text{Total \# of offices that experienced stockouts in last 6 months}}{\text{Total \# of offices assessed}} \times 100$$

Data Source: Module 5. Facility/Office Checklist				
Stockout	**Tools ID**	**Numerator**	**Denominator**	**%**
Maternal health services				
Maternal health services—Labour and delivery printed register	5.1	*	*	*
Maternal health services—Operation theatre printed register	5.2	*	*	*
Maternal health services—Postnatal ward printed register	5.3	*	*	*
Maternal health services—Printed death register	5.4	*	*	*
Child health services				
Child health services—Postnatal ward printed register	6.1	*	*	*
Child health services—Kangaroo mother care ward/corner printed register	6.2	*	*	*
Child health services—Neonatal inpatient care ward printed register	6.3	*	*	*
Child health services—Special care newborn ward printed register	6.4	*	*	*
Child health services—Intensive care newborn ward printed register	6.5	*	*	*
Child health services—Printed death register	6.6	*	*	*

* not collected during this EN-MINI-PRISM Tools pilot assessment

Table 5A.11 Availability of staff—designated to compile and analyze data

Availability of staff to compile and analyze data

Indicator: Existence of designated staff responsible for compiling reports at the central level

$$\frac{\text{Existence of designated staff responsible for report compiling}}{1} \times 100$$

Data Source—Module IIa: RHIS Performance Diagnostic Tool (Central Level)			
Indicator	**Numerator**	**Denominator**	**%**
Central level has a designated person responsible for entering data/compiling reports from health facilities	*	*	*

* not collected during this EN-MINI-PRISM Tools pilot assessment

Table 5A.12 Availability of staff—designated for internal data quality review

Indicator: Existence of designated staff for internal data quality review at the central level

$$\frac{\text{Existence of designated staff for internal data quality review at the central level}}{\text{Total \# of sites assessed (=1)}} \times 100$$

Data Source—Module IIa: RHIS Performance Diagnostic Tool (Central Level)			
Indicator	**Numerator**	**Denominator**	**%**
Central level has a designated person to review the quality of compiled data prior to submission to the next level **(Yes)**	*	*	*
Central level has a designated person to review the quality of compiled data prior to submission to the next level **(Partially)**	*	*	*

* not collected during this EN-MINI-PRISM Tools pilot assessment

Table 5A.13 Availability of staff—designated for data analysis and dissemination

Indicator: Existence of designated staff for data analysis and dissemination at the central level

$$\frac{\text{Total \# of sites that have designated staff for data analysis and dissemination}}{\text{Total \# of sites assessed}} \times 100$$

Data Source—Module V: Facility/Office Checklist										
Staff Code	**Title**	**Responsible for data compilation of reports submitted that are coming from the lower levels**			**Responsible for checking the quality of reports submitted from the lower levels**			**Responsible for data analysis (producing comparison tables, graphs, dashboards)**		
		Numerator	**Denominator**	**Ratio**	**Numerator**	**Denominator**	**Ratio**	**Numerator**	**Denominator**	**Ratio**
1	Head of central health office	*	*	*	*	*	*	*	*	*
2	Program officer	*	*	*	*	*	*	*	*	*
3	Disease surveillance officer	*	*	*	*	*	*	*	*	*
4	M&E/HMIS officer	*	*	*	*	*	*	*	*	*
5	Data clerk	*	*	*	*	*	*	*	*	*
96	Other (specify)	*	*	*	*	*	*	*	*	*
Any designated staff		0	*	*	*	*	*	*	*	*

* not collected during this EN-MINI-PRISM Tools pilot assessment

Table 5A.14 Ratio designated staff for data analysis and dissemination per site

Any designated staff				
Variables		**Numerator**	**Denominator**	**Ratio**
Responsible for data compilation of reports submitted that are coming from the lower levels	Any designated staff	*	*	*
Responsible for checking the quality of reports from the lower level	Any designated staff	*	*	*
Responsible for data analysis	Any designated staff	*	*	*

* not collected during this EN-MINI-PRISM Tools pilot assessment

Table 5A.15 RHIS capacity development—plan

RHIS capacity development

Indicator: Existence of staff capacity development plan at the central level

$$\frac{\text{Existence of staff capacity development plan at the central level (=1 if yes)}}{\text{Total \# of sites assessed (=1)}} \times 100$$

Data Source—Module IV: MAT			
Indicator	**Numerator**	**Denominator**	**%**
Has a costed training and capacity development plan that has benchmarks, timelines, and mechanism for on-the-job RHIS training, RHIS workshops, and orientation for new staff	*	*	*

* not collected during this EN-MINI-PRISM Tools pilot assessment

Table 5A.16 RHIS capacity development—RHIS training

Indicator: % of staff who have received RHIS training (among those who are responsible for performing various RHIS tasks)

$$\frac{\text{Total \# of staff who have received RHIS training}}{\text{Total \# of staff who are responsible for RHIS tasks } \textit{(one of three denominators possible)}} \times 100$$

Data Source—Module V: Facility/Office Checklist (Central)								
Staff Code	**Staff**	**Numerator**	**Among those responsible for data compilation of reports from the lower levels**		**Among those responsible for checking the quality of reports from the lower levels**		**Among those responsible for data analysis (producing comparison tables, graphs, dashboards)**	
			Denominator	**%**	**Denominator**	**%**	**Denominator**	**%**
1	Head of central health office	*	*	*	*	*	*	*
2	Program officer	*	*	*	*	*	*	*
3	Disease surveillance officer	*	*	*	*	*	*	*
4	M&E/HMIS officer	*	*	*	*	*	*	*
5	Data clerk	*	*	*	*	*	*	*
96	Other (specify)	*	*	*	*	*	*	*

* not collected during this EN-MINI-PRISM Tools pilot assessment

Table 5A.17 RHIS capacity development—received training by type

Indicator: % of staff who have received training, by type of training

$$\frac{\text{Total \# of staff receiving training by type of training}}{\text{Total \# of staff who are responsible for RHIS tasks } \textit{(one of three denominators possible)}} \times 100$$

Data Source—Module V: Facility/Office Checklist Central										
Variables		Responsible for data compilation of reports from the lower levels			Responsible for checking the quality of reports from the lower level			Responsible for data analysis		
		Numerator	Denominator	%	Numerator	Denominator	%	Numerator	Denominator	%
Subject of last training	Data entry	*	*	*	*	*	*	*	*	*
	Check and verify quality of data	*	*	*	*	*	*	*	*	*
	Generating aggregate reports	*	*	*	*	*	*	*	*	*
	Data analysis and interpretation	*	*	*	*	*	*	*	*	*
	Using data for decision making	*	*	*	*	*	*	*	*	*

* not collected during this EN-MINI-PRISM Tools pilot assessment

Table 5A.18 Commitment and support for high-quality data

Commitment and support for high-quality data

Indicator: Mean score of respondents who perceive that the organization gives due emphasis to data quality

$$\frac{\text{Sum of 3 respondent scores on perceived organizational emphasis on data quality}}{\text{(Total \# of respondents x 5) x 3}} \times 100$$

5 being the highest possible score on every answer.
3 being the number of questions asked to calculate this specific indicator.
We assume that the same number of people answered questions S2, S6, and S8.

Data Source—Module VI: OBAT			
	Central		
Indicator	Numerator	Denominator	%
Respondent perceives that the organization gives due emphasis to data quality	*	*	*

* not collected during this EN-MINI-PRISM Tools pilot assessment

Table 5A.19 Commitment and support of information use

Commitment and support of information use

Indicator: Mean score of respondents who perceive that the organization supports information use

$$\frac{\text{Sum of 4 respondent scores on perceived organizational support of information use}}{(\text{Total \# of respondents} \times 5) \times 4} \times 100$$

5 being the highest possible score on every answer.
4 being the number of questions asked to calculate this specific indicator.
We assume that the same number of people answered questions S4, S7, P5, and P8.

Data Source—Module VI: OBAT			
	Central		
Indicator	**Numerator**	**Denominator**	**%**
Respondent perceives that the organization supports information use	*	*	*

* not collected during this EN-MINI-PRISM Tools pilot assessment

Table 5A.20 Evidence-based decision making

Evidence-based decision making

Indicator: Mean score of respondents who perceive that the organization promotes a culture of evidence-based decision making

$$\frac{\text{Sum of 9 respondent scores on perceived organizational culture of evidence-based decision making}}{(\text{Total \# of respondents} \times 5) \times 9} \times 100$$

5 being the highest possible score on every answer.
9 being the number of questions asked to calculate this specific indicator.
We assume that the same number of people answered questions D1 through D9.

Data Source—Module IV: OBAT			
	Central		
Indicator	**Numerator**	**Denominator**	**%**
Respondent perceives the organization as promoting a culture of evidence-based decision making	*	*	*

* not collected during this EN-MINI-PRISM Tools pilot assessment

Table 5A.21 Promotion of problem solving

Promotion of problem solving

Indicator: Mean score of respondents who perceive that the organization promotes a culture of problem solving

$$\frac{\text{Sum of 4 respondent scores on perceived organizational promotion of a problem-solving culture}}{\text{Total \# of respondents x 5 x 4}} \times 100$$

5 being the highest possible score on every answer.
4 being the number of questions asked to calculate this specific indicator.
We assume that the same number of people answered questions S5, P6, P7, and P9.

Data Source—Module IV: OBAT			
	Central		
Indicator	**Numerator**	**Denominator**	**%**
Respondent perceives that the organization promotes a culture of problem solving	*	*	*

* not collected during this EN-MINI-PRISM Tools pilot assessment

Table 5A.22 Sharing information between levels

Sharing information between levels

Indicator: Mean score of respondents who perceive that the organization promotes bidirectional flow of feedback

$$\frac{\text{Sum of 2 respondent scores on perceived organizational promotion of bidirectional flow of feedback}}{\text{(Total \# of respondents x 5) x 2}} \times 100$$

5 being the highest possible score on every answer.
2 being the number of questions asked to calculate this specific indicator.
We assume that the same number of people answered questions S1 and S3.

Data Source—Module IV: OBAT			
	Central		
Indicator	**Numerator**	**Denominator**	**%**
Respondent perceives that the organization promotes bidirectional flow of feedback	*	*	*

* not collected during this EN-MINI-PRISM Tools pilot assessment

Table 5A.23 Sense of responsibility

Sense of responsibility

Indicator: Mean score of respondents who perceive that the organization has a culture that instills a sense of responsibility

$$\frac{\text{Sum of 5 respondent scores on perceived organizational culture of instilling a sense of responsibility}}{\text{(Total \# of respondents x 5) x 5}} \times 100$$

5 being the highest possible score on every answer.
5 being the number of questions asked to calculate this specific indicator.
We assume the same number of people answered questions P1, P2, P3, P4, and P12.

Data Source—Module IV: OBAT			
	Central		
Indicator	**Numerator**	**Denominator**	**%**
Respondent perceives that the organization has a culture that instills a sense of responsibility	*	*	*

* not collected during this EN-MINI-PRISM Tools pilot assessment

Table 5A.24 Empowerment and accountability

Empowerment and accountability

Indicator: Mean score of respondents who perceive that the organization empowers people to ask questions, seek improvement, learn, and improve quality through useful information

$$\frac{\text{Sum of 2 respondent scores on perceived organizational empowering for learning and improvement}}{\text{(Total \# of respondents x 5) x 2}} \times 100$$

5 being the highest possible score on every answer.
2 being the number of questions asked to calculate this specific indicator.
We assume that the same number of people answered questions P10 and P11.

Data Source—Module IV: OBAT			
	Central		
Indicator	**Numerator**	**Denominator**	**%**
Respondent perceives that the organization empowers people to ask questions, seek improvement, learn, and improve quality through useful information	*	*	*

* not collected during this EN-MINI-PRISM Tools pilot assessment

Table 5A.25 Rewarding good performance

Rewarding good performance

Indicator: Mean score of respondents who perceive that the organization recognizes and rewards good performance

$$\frac{\text{Sum of respondent scores on perceived organizational recognition and reward of performance}}{\text{Total \# of respondents x 5}} \times 100$$

5 being the highest possible score on every answer

Data Source—Module IV: OBAT			
	Central		
Indicator	**Numerator**	**Denominator**	**%**
Respondent perceives that the organization recognizes and rewards good performance	*	*	*

* not collected during this EN-MINI-PRISM Tools pilot assessment

Table 5A.26 Data quality assurance

Data quality assurance

Indicator: Mean score of level of perceived ability to perform data quality checks

$$\frac{\text{Sum of all self-ratings from 0–10 on ability to perform data quality checks}}{\text{Total \# of respondents X10}} \times 100$$

Data Source—Module IV: OBAT			
	Central		
Indicator	**Numerator**	**Denominator**	**%**
Respondent believes that they can check data accuracy	*	*	*

* not collected during this EN-MINI-PRISM Tools pilot assessment

Table 5A.27 Calculating indicators

Calculating indicators

Indicator: Mean score of level of perceived ability to calculate indicators

$$\frac{\text{Sum of all self-ratings from 0–10 on ability to calculate indicators}}{\text{Total \# of respondents X10}} \times 100$$

Data Source—Module IV: OBAT			
	Central		
Indicator	**Numerator**	**Denominator**	**%**
Respondent believes that they can calculate percentages/rates correctly	*	*	*

* not collected during this EN-MINI-PRISM Tools pilot assessment

Table 5A.28 Data presentation

Data presentation

Indicator: Mean score of level of perceived ability to prepare data visuals

$$\frac{\text{Sum of all self-ratings from 0–10 on ability to prepare data visuals}}{\text{Total \# of respondents x10}} \text{ X } 100$$

Data Source—Module IV: OBAT			
	Central		
Indicator	**Numerator**	**Denominator**	**%**
Respondent believes that they can plot a trend on a chart	*	*	*

* not collected during this EN-MINI-PRISM Tools pilot assessment

Table 5A.29 Data interpretation

Data interpretation

Indicator: Mean score of level of perceived ability to interpret data

$$\frac{\text{Sum of all self-ratings from 0–10 on ability to interpret data}}{\text{Total \# of respondents x10}} \text{ X } 100$$

Data Source—Module IV: OBAT			
	Central		
Indicator	**Numerator**	**Denominator**	**%**
Respondent believes that they can explain the implication of the results of the data analysis	*	*	*

* not collected during this EN-MINI-PRISM Tools pilot assessment

Table 5A.30 Use of information

Use of information

Indicator: Mean scores of level of perceived ability to use information for problem-solving or making decisions

$$\frac{\text{Sum of all self-ratings from 0–10 on ability to use information for problem-solving or decision making}}{\text{Total \# of respondents x10}} \text{ X } 100$$

* not collected during this EN-MINI-PRISM Tools pilot assessment

Data Source—Module IV: OBAT			
	Central		
Indicator	**Numerator**	**Denominator**	**%**
Respondent believes that they can use data for identifying service performance gaps and setting performance targets	*	*	*
Respondent believes that they can use data for making operational/ management decisions	*	*	*
Combined score			*

* not collected during this EN-MINI-PRISM Tools pilot assessment

Table 5A.31 Motivation among staff

The motivation among staff   **Indicator: Mean score of Staff motivation level to perform RHIS tasks** $\frac{\text{Sum of 5 respondent scores on perceived staff motivation to perform RHIS tasks}}{\text{(Total \# of respondents x 5) x 7}}$ X 100
5 being the highest possible score on every answer.   *5 being the number of questions asked to calculate this specific indicator.*   *We assume that the same number of people answered questions BC1 through BC5.*

Indicator	Numerator	Denominator	%
Respondent's motivation to perform RHIS tasks	*	*	*

* not collected during this EN-MINI-PRISM Tools pilot assessment

Table 5A.32 Knowledge—Rationale for RHIS data

Knowledge   **Indicator: Mean scores of knowledge of the rationale for RHIS data** $\frac{\text{Sum of respondent scores on the selected different items}}{\text{Total \# of respondents x 3}}$ X 100

Data Source—Module IV: OBAT				
		Central		
		Numerator	Denominator	%
Indicator				
Describe at least three reasons for collecting or using the following data on a monthly basis	Newborn diseases/ conditions/ diagnoses on a monthly basis	*	*	*
	Newborn Immunization	*	*	*
	Maternal age	*	*	*
	Age of newborn	*	*	*
	Geographical data or residence of families	*	*	*
	Why population data is needed	*	*	*
Knowledge of the rationale for RHIS data				*

* not collected during this EN-MINI-PRISM Tools pilot assessment

Table 5A.33 Knowledge—data quality checking methods

Indicator: Mean scores of knowledge of data quality checking methods

$$\frac{\text{Sum of respondent scores on the selected different items}}{\text{Total \# of respondents x 3}} \times 100$$

Data Source—Module IV: OBAT			
	Central		
Questions	**Numerator**	**Denominator**	**%**
Describe at least three aspects of data quality	*	*	*
Describe at least three ways of ensuring data quality relevant to your job classification/responsibilities	*	*	*
Knowledge of data quality checking methods			*

* not collected during this EN-MINI-PRISM Tools pilot assessment

Table 5A.34 Actual skills to perform RHIS tasks—competence level in calculating indicators

Actual skills to perform RHIS tasks

Indicator: Mean scores of competency level in calculating indicators

$$\frac{\text{Sum of respondent scores on the selected different items}}{\text{Total \# of respondents}} \times 100$$

Data Source—Module IV: OBAT			
	Central		
Questions	**Numerator**	**Denominator**	**%**
Calculate the percentage of pregnant mothers at the central level attending antenatal care in the current period	*	*	*
What is the neonatal mortality rate?	*	*	*
Calculate the number of newborns who died.	*	*	*
Competence level in calculating indicators			*

* not collected during this EN-MINI-PRISM Tools pilot assessment

Table 5A.35 Actual skills to perform RHIS tasks—competence level in plotting data/preparing charts

Indicator: Mean score of competency level in plotting data/preparing charts
Sum of respondent scores on the selected different items / Total # of respondents X 100

Data Source—Module IV: OBAT			
	Central		
Questions	**Numerator**	**Denominator**	**%**
Develop a bar chart depicting the distribution across the maternal ages of newborns with a low birthweight at the four facilities.	*	*	*

* not collected during this EN-MINI-PRISM Tools pilot assessment

Table 5A.36 Actual skills to perform RHIS tasks—competence level in interpreting data

Indicator: Mean scores of competency level in interpreting data
Sum of respondent scores on the selected different items / Total # of respondents x2 X 100

Data Source—Module IV: OBAT			
	Central		
Scoring	**Numerator**	**Denominator**	**%**
Scoring for **CD2b**: Interpret the graph presented in CD2b	*	*	*
Scoring for CD2c (CD2c1 +CD2c2): Does the central level have the coverage rate (80%) by the end of 2020 for CD2c1? What guidance could you provide on these data for CD2C2?	*	*	*
Competence level in interpreting data			*

* not collected during this EN-MINI-PRISM Tools pilot assessment

Table 5A.37 Actual skills to perform RHIS tasks—competence level in problem solving

Indicator: Mean scores of competency level in problem solving

$$\frac{\text{Sum of respondent scores on the selected different items}}{\text{Total \# of respondents x n (n=2, 3, or 5)}} \times 100$$

Data Source—Module IV: OBAT			
	Central		
Scoring	**Numerator**	**Denominator**	**%**
Scoring for **PSa**: Description of data quality problem	*	*	*
Scoring for **PSb:** Potential reasons for data quality problem	*	*	*
Scoring for **PSc:** Major activities to improve the data quality	*	*	*
Competence level in problem solving			*

* not collected during this EN-MINI-PRISM Tools pilot assessment

Table 5A.38 Actual skills to perform RHIS tasks—competence level in use of information

Indicator: Mean scores of competency level in use of information

$$\frac{\text{Sum of respondent scores on the selected different items}}{\text{Total \# of respondents}} \times 100$$

Data Source—Module IV: OBAT			
	Central		
Scoring	**Numerator**	**Denominator**	**%**
Scoring for **CD2d1**: Provide at least one use of the chart findings at the facility level	*	*	*
Scoring for **CD2d2**: Provide at least one use of the chart findings at the community level	*	*	*
Scoring for **CD2d3**: Provide at least one use of the chart findings at the central level	*	*	*
Competence level in use of information			*

* not collected during this EN-MINI-PRISM Tools pilot assessment

5B. Organizational Factors—Regional Level

Section 5B. Tables: Organizational Factors—Regional Level

B. RHIS Performance Determinants: Organizational Factors- Regional Level

Table 5B.1 RHIS governance—structures

RHIS governance

Indicator: % of sites with good RHIS governance structures in place

$$\frac{\text{Total \# of sites with good RHIS governance structures in place}}{\text{Total \# of sites assessed}} \times 100$$

Data Source—Module IV: MAT			
Indicators	**Numerator**	**Denominator**	**%**
Has written document describing the RHIS mission, roles, and responsibilities that are related to strategic and policy decisions at the region and higher levels	*	*	*
Has current health service organizational and staff chart showing positions related to health information	*	*	*
Office has an overall framework and plan for information and communication technology (ICT), for example, describing the required equipment and plans for training in the use of ICT for RHIS	*	*	*
Office maintains a list/documentation of the dissemination of the RHIS monthly/quarterly reports to the various health program staff in the region, the community, local administration, nongovernmental organizations (NGOs), etc.	*	*	*

* not collected during this EN-MINI-PRISM Tools pilot assessment

Table 5B.2 RHIS governance—Data management guidelines

Indicator: % of sites with RHIS data management guidelines

$$\frac{\textbf{Total \# of sites with RHIS data management guidelines}}{\text{Total \# of sites assessed}} \times 100$$

Data Source—Module IV: MAT			
Indicators	**Numerator**	**Denominator**	**%**
Has written SOPs and procedural guidelines for RHIS with data definition, data collection and reporting, data aggregation, processing, and transmission, data analysis, dissemination and use, data quality assurance, MFL, ICD classification, data security, and performance improvement process **(Completely)**	*	*	*
Has written SOPs and procedural guidelines for RHIS with data definition, data collection and reporting, data aggregation, processing, and transmission, data analysis, dissemination and use, data quality assurance, MFL, ICD classification, data security, and performance improvement process **(Partially)**	*	*	*

* not collected during this EN-MINI-PRISM Tools pilot assessment

Table 5B.3 RHIS planning

RHIS planning

Indicator: % of sites with copies of national HIS documents

$$\frac{\text{Total \# of sites with copies of national HIS documents}}{\text{Total \# of sites assessed}} \times 100$$

Data Source—Module IV: MAT			
Indicators	**Numerator**	**Denominator**	**%**
Has a copy of the national HIS situation analysis/assessment report that is less than three years old	*	*	*
Has a copy of the national three or five-year HIS strategic plan	*	*	*

* not collected during this EN-MINI-PRISM Tools pilot assessment

Table 5B.4 Use of quality improvement standards

Use of quality improvement standards

Indicator: % of regions that have RHIS quality improvement standards

$$\frac{\text{Total \# of regions that have RHIS quality improvement standards}}{\text{Total \# of sites assessed}} \times 100$$

Data Source—Module IV: MAT			
Indicator	**Numerator**	**Denominator**	**%**
Has set RHIS performance targets RHIS performance targets for data accuracy for their respective administrative areas	*	*	*
Has set RHIS performance targets RHIS performance targets for data completeness for their respective administrative areas	*	*	*
Has set RHIS performance targets RHIS performance targets for data timeliness for their respective administrative areas	*	*	*

* not collected during this EN-MINI-PRISM Tools pilot assessment

Table 5B.5 Supervision quality

Supervision quality

Indicator: % of regions that have effective supportive supervision practices /tools available to improve RHIS performance

$$\frac{\text{Total \# of sites with documents related to supervision}}{\text{Total \# of sites assessed}} \times 100$$

Data Source—Module IV: MAT			
	Region		
Indicators	**Numerator**	**Denominator**	**%**
Office has copies of RHIS supervisory guidelines and checklists	*	*	*
Office maintains a schedule for RHIS supervisory visits	*	*	*
Office has copies of the reports from RHIS supervisory visits conducted during the current fiscal year	*	*	*
HFs that received a supervisory visit have copies of the report from latest supervisory visit and commonly agreed action points are listed	*	*	*

* not collected during this EN-MINI-PRISM Tools pilot assessment

Table 5B.6 Financial resources to support RHIS activities

Financial resources to support RHIS activities

Indicator: % of regions that allocated financial resources for RHIS activities

$$\frac{\text{Total \# of regions that allocated financial resources for RHIS activities}}{\text{Total \# of sites assessed}} \times 100$$

Data Source—Module IV: MAT			
	Region		
Indicator	**Numerator**	**Denominator**	**%**
Office has a copy of the long-term financial plan for supporting RHIS activities	*	*	*

* not collected during this EN-MINI-PRISM Tools pilot assessment

Table 5B.7 Infrastructure for RHIS data management

Infrastructure for RHIS data management

Indicator: % of sites with Internet connectivity

$$\frac{\text{Total number of sites with available recording and reporting forms}}{\text{Total \# of sites assessed}} \times 100$$

Data Source—Module V: Facility/Office Checklist			
Indicator	**Numerator**	**Denominator**	**%**
Access to an Internet network	*	*	*

* not collected during this EN-MINI-PRISM Tools pilot assessment

Table 5B.8 RHIS supplies for data collection and aggregation—total recording and reporting forms

RHIS supplies for data collection and aggregation

Indicator: Indicator: % of sites with an adequate supply of RHIS recording and reporting forms

$$\frac{\text{Total number of sites with available recording and reporting forms}}{\text{Total \# of sites assessed}} \times 100$$

Data Source: Module 5. Facility/Office Checklist				
Tool Availability	**Tools ID**	**Numerator**	**Denominator**	**%**
Maternal health services				
Maternal health services—Labour and delivery printed register	5.1	*	*	*
Maternal health services—Operation theatre printed register	5.2	*	*	*
Maternal health services—Postnatal ward printed register	5.3	*	*	*
Maternal health services—Printed death register	5.4	*	*	*
Child health services				
Child health services—Postnatal ward printed register	6.1	*	*	*
Child health services—Kangaroo mother care ward/corner printed register	6.2	*	*	*
Child health services—Neonatal inpatient care ward printed register	6.3	*	*	*
Child health services—Special care newborn ward printed register	6.4	*	*	*
Child health services—Intensive care newborn ward printed register	6.5	*	*	*
Child health services—Printed death register	6.6	*	*	*

* not collected during this EN-MINI-PRISM Tools pilot assessment

Table 5B.9 RHIS supplies for data collection and aggregation—standard recording and reporting forms

Indicator: % of sites with an adequate supply of standard RHIS recording and reporting forms	
Total # of standard RHIS tools available at the facility or office	X 100
Total # of tools available at the facility or office	

Data Source: Module 5. Facility/Office Checklist				
Standard RHIS tool	**Tools ID**	**Numerator**	**Denominator**	**%**
Maternal health services				
Maternal health services—Labour and delivery printed register	5.1	*	*	*
Maternal health services—Operation theatre printed register	5.2	*	*	*
Maternal health services—Postnatal ward printed register	5.3	*	*	*
Maternal health services—Printed death register	5.4	*	*	*
Child health services				
Child health services—Postnatal ward printed register	6.1	*	*	*
Child health services—Kangaroo mother care ward/corner printed register	6.2	*	*	*
Child health services—Neonatal inpatient care ward printed register	6.3	*	*	*
Child health services—Special care newborn ward printed register	6.4	*	*	*
Child health services—Intensive care newborn ward printed register	6.5	*	*	*
Child health services—Printed death register	6.6	*	*	*

* not collected during this EN-MINI-PRISM Tools pilot assessment

Table 5B.10 Facilities or offices with no stock-outs of recording and reporting tools within the past six months

Indicator: % of facilities or offices with no stock-outs of recording and reporting tools within the past six months

$$\frac{\text{Total \# of offices that experienced stockouts in last 6 months}}{\text{Total \# of offices assessed}} \times 100$$

Data Source: Module 5. Facility/Office Checklist				
Stockout	**Tools ID**	**Numerator**	**Denominator**	**%**
Maternal health services				
Maternal health services—Labour and delivery printed register	5.1	*	*	*
Maternal health services—Operation theatre printed register	5.2	*	*	*
Maternal health services—Postnatal ward printed register	5.3	*	*	*
Maternal health services—Printed death register	5.4	*	*	*
Child health services				
Child health services—Postnatal ward printed register	6.1	*	*	*
Child health services—Kangaroo mother care ward/corner printed register	6.2	*	*	*
Child health services—Neonatal inpatient care ward printed register	6.3	*	*	*
Child health services—Special care newborn ward printed register	6.4	*	*	*
Child health services—Intensive care newborn ward printed register	6.5	*	*	*
Child health services—Printed death register	6.6	*	*	*

* not collected during this EN-MINI-PRISM Tools pilot assessment

Table 5B.11 Availability of staff—designated to compile and analyze data

Availability of staff to compile and analyze data

Indicator: % of sites that have designated staff responsible for entering data/compiling reports

$$\frac{\text{Total \# of sites with designated staff responsible for entering data/compiling reports}}{\text{Total \# of sites assessed}} \times 100$$

Data Source—Module IIa: RHIS Performance Diagnostic Tool (Region Level)			
Indicator	**Numerator**	**Denominator**	**%**
Region has a designated person responsible for entering data/compiling reports from health facilities	*	*	*

* not collected during this EN-MINI-PRISM Tools pilot assessment

Table 5B.12 Availability of staff—designated for internal data quality review

Indicator: % of sites that have designated staff for internal data quality review
Total number of sites that have designated staff for internal data quality review / Total # of sites assessed X 100

Data Source—Module IIa: RHIS Performance Diagnostic Tool (Region Level)			
Indicator	**Numerator**	**Denominator**	**%**
Region level has a designated person to review the quality of compiled data prior to submission to the next level **(Yes)**	*	*	*
Region level has a designated person to review the quality of compiled data prior to submission to the next level **(Partially)**	*	*	*

* not collected during this EN-MINI-PRISM Tools pilot assessment

Table 5B.13 Availability of staff—designated for data analysis and dissemination

Indicator: % of sites that have designated staff for data analysis and dissemination
Total # of sites that have designated staff for data analysis and dissemination / Total # of sites assessed X 100

Data Source—Module V: Facility/Office Checklist											
Staff Code	**Title**	**Responsible for data compilation of reports submitted that are coming from the lower levels**			**Responsible for checking the quality of reports submitted from the lower levels**			**Responsible for data analysis (producing comparison tables, graphs, dashboards)**			
		Numerator	**Denominator**	**Ratio**	**Numerator**	**Denominator**	**Ratio**	**Numerator**	**Denominator**	**Ratio**	
1	Head of regional health office	*	*	*	*	*	*	*	*	*	
2	Program officer	*	*	*	*	*	*	*	*	*	
3	Disease surveillance officer	*	*	*	*	*	*	*	*	*	
4	M&E/HMIS officer	*	*	*	*	*	*	*	*	*	
5	Data clerk	*	*	*	*	*	*	*	*	*	
96	Other (specify)	*	*	*	*	*	*	*	*	*	
Any designated staff		0	*	*	*	*	*	*	*	*	

* not collected during this EN-MINI-PRISM Tools pilot assessment

Table 5B.14 Ratio designated staff for data analysis and dissemination per site

Any designated staff				
Variables		**Numerator**	**Denominator**	**Ratio**
Responsible for data compilation of reports submitted that are coming from the lower levels	Any designated staff	*	*	*
Responsible for checking the quality of reports from the lower level	Any designated staff	*	*	*
Responsible for data analysis	Any designated staff	*	*	*

* not collected during this EN-MINI-PRISM Tools pilot assessment

Table 5B.15 RHIS capacity development—plan

RHIS capacity development
Indicator: % of regions with staff capacity development plan
Total # of regions with staff capacity development plan / Total # of sites assessed X 100

Data Source—Module IV: MAT			
Indicator	**Numerator**	**Denominator**	**%**
Has a costed training and capacity development plan that has benchmarks, timelines, and mechanism for on-the-job RHIS training, RHIS workshops, and orientation for new staff	*	*	*

* not collected during this EN-MINI-PRISM Tools pilot assessment

Table 5B.16 RHIS capacity development—RHIS training

Indicator: % of staff who have received RHIS training (among those who are responsible for performing various RHIS tasks)
Total # of staff who have received RHIS training / Total # of staff who are responsible for RHIS tasks *(one of three denominators possible)* X 100

Data Source—Module V: Facility/Office Checklist (Region)								
Staff Code	**Staff**	**Among those responsible for data compilation of reports from the lower levels**			**Among those responsible for checking the quality of reports from the lower levels**		**Among those responsible for data analysis (producing comparison tables, graphs, dashboards)**	
		Numerator	**Denominator**	**%**	**Denominator**	**%**	**Denominator**	**%**
1	Head of regional health office	*	*	*	*	*	*	*
2	Program officer	*	*	*	*	*	*	*
3	Disease surveillance officer	*	*	*	*	*	*	*
4	M&E/HMIS officer	*	*	*	*	*	*	*
5	Data clerk	*	*	*	*	*	*	*
96	Other (specify)	*	*	*	*	*	*	*

* not collected during this EN-MINI-PRISM Tools pilot assessment

Table 5B.17 RHIS capacity development—received training by type

Indicator: % of staff who have received RHIS training (among those who are responsible for performing various RHIS tasks)

$$\frac{\text{Total \# of staff receiving training by type of training}}{\text{Total \# of staff who are responsible for RHIS tasks } \textit{(one of three denominators possible)}} \times 100$$

Data Source—Module V: Facility/Office Checklist (Region)										
Variables		Responsible for data compilation of reports from the lower levels			Responsible for checking the quality of reports from the lower level			Responsible for data analysis		
		Numerator	Denominator	%	Numerator	Denominator	%	Numerator	Denominator	%
Subject of last training	Data entry	*	*	*	*	*	*	*	*	*
	Check and verify quality of data	*	*	*	*	*	*	*	*	*
	Generating aggregate reports	*	*	*	*	*	*	*	*	*
	Data analysis and interpretation	*	*	*	*	*	*	*	*	*
	Using data for decision making	*	*	*	*	*	*	*	*	*

* not collected during this EN-MINI-PRISM Tools pilot assessment

Table 5B.18 Commitment and support for high-quality data

Commitment and support for high-quality data

Indicator: Mean score of respondents who perceive that the organization gives due emphasis to data quality

$$\frac{\text{Sum of 3 respondent scores on perceived organizational emphasis on data quality}}{(\text{Total \# of respondents} \times 5) \times 3} \times 100$$

5 being the highest possible score on every answer.
3 being the number of questions asked to calculate this specific indicator.
We assume that the same number of people answered questions S2, S6, and S8.

Data Source—Module VI: OBAT			
	Region		
Indicator	Numerator	Denominator	%
Respondent perceives that the organization gives due emphasis to data quality	*	*	*

* not collected during this EN-MINI-PRISM Tools pilot assessment

Table 5B.19 Commitment and support of information use

Commitment and support of information use

Indicator: Mean score of respondents who perceive that the organization supports information use

$$\frac{\text{Sum of 4 respondent scores on perceived organizational support of information use}}{\text{(Total \# of respondents x 5) x 4}} \times 100$$

5 being the highest possible score on every answer.
4 being the number of questions asked to calculate this specific indicator.
We assume that the same number of people answered questions S4, S7, P5, and P8.

Data Source—Module VI: OBAT			
	Region		
Indicator	**Numerator**	**Denominator**	**%**
Respondent perceives that the organization supports information use	*	*	*

* not collected during this EN-MINI-PRISM Tools pilot assessment

Table 5B.20 Evidence-based decision making

Evidence-based decision making

Indicator: Mean score of respondents who perceive that the organization promotes a culture of evidence-based decision making

$$\frac{\text{Sum of 9 respondent scores on perceived organizational culture of evidence-based decision making}}{\text{(Total \# of respondents x 5) x 9}} \times 100$$

5 being the highest possible score on every answer.
9 being the number of questions asked to calculate this specific indicator.
We assume that the same number of people answered questions D1 through D9.

Data Source—Module IV: OBAT			
	Region		
Indicator	**Numerator**	**Denominator**	**%**
Respondent perceives the organization as promoting a culture of evidence-based decision making	*	*	*

* not collected during this EN-MINI-PRISM Tools pilot assessment

Table 5B.21 Promotion problem solving

Promotion of problem solving

Indicator: Mean score of respondents who perceive that the organization promotes a culture of problem solving

$$\frac{\text{Sum of 4 respondent scores on perceived organizational promotion of a problem-solving culture}}{\text{Total \# of respondents} \times 5 \times 4} \times 100$$

5 being the highest possible score on every answer.
4 being the number of questions asked to calculate this specific indicator.
We assume that the same number of people answered questions S5, P6, P7, and P9.

Data Source—Module IV: OBAT			
	Region		
Indicator	**Numerator**	**Denominator**	**%**
Respondent perceives that the organization promotes a culture of problem solving	*	*	*

* not collected during this EN-MINI-PRISM Tools pilot assessment

Table 5B.22 Sharing information between levels

Sharing information between levels

Indicator: Mean score of respondents who perceive that the organization promotes bidirectional flow of feedback

$$\frac{\text{Sum of 2 respondent scores on perceived organizational promotion of bidirectional flow of feedback}}{(\text{Total \# of respondents} \times 5) \times 2} \times 100$$

5 being the highest possible score on every answer.
2 being the number of questions asked to calculate this specific indicator.
We assume that the same number of people answered questions S1 and S3.

Data Source—Module IV: OBAT			
	Region		
Indicator	**Numerator**	**Denominator**	**%**
Respondent perceives that the organization promotes bidirectional flow of feedback	*	*	*

* not collected during this EN-MINI-PRISM Tools pilot assessment

Table 5B.23 Sense of responsibility

Sense of responsibility

Indicator: Mean score of respondents who perceive that the organization has a culture that instills a sense of responsibility

$$\frac{\text{Sum of 5 respondent scores on perceived organizational culture of instilling a sense of responsibility}}{\text{(Total \# of respondents x 5) x 5}} \times 100$$

5 being the highest possible score on every answer.
5 being the number of questions asked to calculate this specific indicator.
We assume the same number of people answered questions P1, P2, P3, P4, and P12.

Data Source—Module IV: OBAT			
	Region		
Indicator	**Numerator**	**Denominator**	**%**
Respondent perceives that the organization has a culture that instills a sense of responsibility	*	*	*

* not collected during this EN-MINI-PRISM Tools pilot assessment

Table 5B.24 Empowerment and accountability

Empowerment and accountability

Indicator: Mean score of respondents who perceive that the organization empowers people to ask questions, seek improvement, learn, and improve quality through useful information

$$\frac{\text{Sum of 2 respondent scores on perceived organizational empowering for learning and improvement}}{\text{(Total \# of respondents x 5) x 2}} \times 100$$

5 being the highest possible score on every answer.
2 being the number of questions asked to calculate this specific indicator.
We assume that the same number of people answered questions P10 and P11.

Data Source—Module IV: OBAT			
	Region		
Indicator	**Numerator**	**Denominator**	**%**
Respondent perceives that the organization empowers people to ask questions, seek improvement, learn, and improve quality through useful information	*	*	*

* not collected during this EN-MINI-PRISM Tools pilot assessment

Table 5B.25 Rewarding good performance

Rewarding good performance

Indicator: Mean score of respondents who perceive that the organization recognizes and rewards good performance

$$\frac{\text{Sum of respondent scores on perceived organizational recognition and reward of performance}}{\text{Total \# of respondents x 5}} \times 100$$

5 being the highest possible score on every answer.

Data Source—Module IV: OBAT			
	Region		
Indicator	**Numerator**	**Denominator**	**%**
Respondent perceives that the organization recognizes and rewards good performance	*	*	*

* not collected during this EN-MINI-PRISM Tools pilot assessment

Table 5B.26 Data quality assurance

Data quality assurance

Indicator: Mean score of level of perceived ability to perform data quality checks

$$\frac{\text{Sum of all self-ratings from 0–10 on ability to perform data quality checks}}{\text{Total \# of respondents X10}} \times 100$$

Data Source—Module IV: OBAT			
	Region		
Indicator	**Numerator**	**Denominator**	**%**
Respondent believes that they can check data accuracy	*	*	*

* not collected during this EN-MINI-PRISM Tools pilot assessment

Table 5B.27 Calculating indicators

Calculating indicators

Indicator: Mean score of level of perceived ability to calculate indicators

$$\frac{\text{Sum of all self-ratings from 0–10 on ability to calculate indicators}}{\text{Total \# of respondents X10}} \times 100$$

Data Source—Module IV: OBAT			
	Region		
Indicator	**Numerator**	**Denominator**	**%**
Respondent believes that they can calculate percentages/rates correctly	*	*	*

* not collected during this EN-MINI-PRISM Tools pilot assessment

Table 5B.28a Data presentation

Data presentation

Indicator: Mean score of level of perceived ability to prepare data visuals

$$\frac{\text{Sum of all self-ratings from 0–10 on ability to prepare data visuals}}{\text{Total \# of respondents x10}} \times 100$$

Data Source—Module IV: OBAT			
	Region		
Indicator	**Numerator**	**Denominator**	**%**
Respondent believes that they can plot a trend on a chart	*	*	*

* not collected during this EN-MINI-PRISM Tools pilot assessment

Table 5B.28b Data interpretation

Data interpretation

Indicator: Mean score of level of perceived ability to interpret data

$$\frac{\text{Sum of all self-ratings from 0–10 on ability to interpret data}}{\text{Total \# of respondents x10}} \times 100$$

Data Source—Module IV: OBAT			
	Region		
Indicator	**Numerator**	**Denominator**	**%**
Respondent believes that they can explain the implication of the results of the data analysis	*	*	*

* not collected during this EN-MINI-PRISM Tools pilot assessment

Table 5B.29 Use of information

Use of information

Indicator: Mean scores of levels of perceived ability to use information for problem-solving or making decisions

$$\frac{\text{Sum of all self-ratings from 0–10 on ability to use information for problem-solving or decision making}}{\text{Total \# of respondents x10}} \times 100$$

Data Source—Module IV: OBAT			
	Region		
Indicator	**Numerator**	**Denominator**	**%**
Respondent believes that they can use data for identifying service performance gaps and setting performance targets	*	*	*
Respondent believes that they can use data for making operational/ management decisions	*	*	*
Combined score			*****

* not collected during this EN-MINI-PRISM Tools pilot assessment

Table 5B.30 Motivation among staff

The motivation among staff

Indicator: Mean score of Staff motivation level to perform RHIS tasks

$$\frac{\text{Sum of 5 respondent scores on perceived staff motivation to perform RHIS tasks}}{\text{(Total \# of respondents x 5) x 7}} \times 100$$

5 being the highest possible score on every answer.
5 being the number of questions asked to calculate this specific indicator.
We assume that the same number of people answered questions BC1 through BC5.

Data Source—Module IV: OBAT			
	Region		
Indicator	**Numerator**	**Denominator**	**%**
Respondent's motivation to perform RHIS tasks	*	*	*

* not collected during this EN-MINI-PRISM Tools pilot assessment

Table 5B.31 Knowledge of the rationale for RHIS data

Knowledge

Indicator: Mean scores of Knowledges of the rationale for RHIS data

$$\frac{\text{Sum of respondent scores on the selected different items}}{\text{Total \# of respondents x 3}} \times 100$$

Data Source—Module IV: OBAT				
	Region			
		Numerator	**Denominator**	**%**
	Indicator			
Describe at least three reasons for collecting or using the following data on a monthly basis	Newborn diseases/conditions/diagnoses on a monthly basis	*	*	*
	Newborn Immunization	*	*	*
	Maternal age	*	*	*
	Age of newborn	*	*	*
	Geographical data or residence of families	*	*	*
	Why population data is needed	*	*	*
			Knowledge of the rationale for RHIS data	*****

* not collected during this EN-MINI-PRISM Tools pilot assessment

Table 5B.32 Knowledge of data quality checking methods

Indicator: Mean scores of Knowledge of data quality checking methods

$$\frac{\text{Sum of respondent scores on the selected different items}}{\text{Total \# of respondents x 3}} \times 100$$

Data Source—Module IV: OBAT			
	Region		
Questions	**Numerator**	**Denominator**	**%**
Describe at least three aspects of data quality	*	*	*
Describe at least three ways of ensuring data quality relevant to your job classification/responsibilities	*	*	*
Knowledge of data quality checking methods			*

* not collected during this EN-MINI-PRISM Tools pilot assessment

Table 5B.33 Actual skills to perform RHIS tasks—competence level in calculating indicators

Actual skills to perform RHIS tasks

Indicator: Mean scores of competency level in calculating indicators

$$\frac{\text{Sum of respondent scores on the selected different items}}{\text{Total \# of respondents}} \times 100$$

Data Source—Module IV: OBAT			
	Region		
Questions	**Numerator**	**Denominator**	**%**
Calculate the percentage of pregnant mothers at the region level attending antenatal care in the current period	*	*	*
What is the neonatal mortality rate?	*	*	*
Calculate the number of newborns who died.	*	*	*
Competence level in calculating indicators			*

* not collected during this EN-MINI-PRISM Tools pilot assessment

Table 5B.34 Actual skills to perform RHIS tasks—competence level in plotting data/preparing charts

Indicator: Mean score of competency level in plotting data/preparing charts

$$\frac{\text{Sum of respondent scores on the selected different items}}{\text{Total \# of respondents}} \times 100$$

Data Source—Module IV: OBAT			
	Region		
Questions	**Numerator**	**Denominator**	**%**
Develop a bar chart depicting the distribution across the maternal ages of newborns with a low birthweight at the four facilities	*	*	*

* not collected during this EN-MINI-PRISM Tools pilot assessment

Table 5B.35 Actual skills to perform RHIS tasks—competence level in interpreting data

Indicator: Mean scores of competency level in interpreting data

$$\frac{\text{Sum of respondent scores on the selected different items}}{\text{Total \# of respondents x2}} \times 100$$

Data Source—Module IV: OBAT			
	Region		
Scoring	**Numerator**	**Denominator**	**%**
Scoring for **CD2b**: Interpret the graph presented in CD2b	*	*	*
Scoring for CD2c (CD2c1 +CD2c2): Does the region level have the coverage rate (80%) by the end of 2020 for CD2c1? What guidance could you provide on these data for CD2C2?	*	*	*
Competence level in interpreting data			*****

* not collected during this EN-MINI-PRISM Tools pilot assessment

Table 5B.36 Actual skills to perform RHIS tasks—competence level in problem solving

Indicator: Mean scores of competency level in problem solving

$$\frac{\text{Sum of respondent scores on the selected different items}}{\text{Total \# of respondents x n (n=2, 3, or 5)}} \times 100$$

Data Source—Module IV: OBAT			
	Region		
Scoring	**Numerator**	**Denominator**	**%**
Scoring for **PSa**: Description of data quality problem	*	*	*
Scoring for **PSb:** Potential reasons for data quality problem	*	*	*
Scoring for **PSc:** Major activities to improve the data quality	*	*	*
Competence level in problem solving			*

* not collected during this EN-MINI-PRISM Tools pilot assessment

Table 5B.37 Actual skills to perform RHIS tasks—competence level in use of information

Indicator: Mean scores of competency level in use of information

$$\frac{\text{Sum of respondent scores on the selected different items}}{\text{Total \# of respondents}} \times 100$$

Data Source—Module IV: OBAT			
	Region		
Scoring	**Numerator**	**Denominator**	**%**
Scoring for **CD2d1**: Provide at least one use of the chart findings at the facility level	*	*	*
Scoring for **CD2d2**: Provide at least one use of the chart findings at the community level	*	*	*
Scoring for **CD2d3**: Provide at least one use of the chart findings at the region level	*	*	*
Competence level in use of information			*

* not collected during this EN-MINI-PRISM Tools pilot assessment

5C. Organizational Factors—District Level

Section 5C. Tables: Organizational Factors—District Level

C. RHIS Performance Determinants: Organizational Factors- District Level

Table 5C.1 RHIS governance—structures

RHIS governance

Indicator: % of sites with good RHIS governance structures in place

$$\frac{\text{Total \# of sites with good RHIS governance structures in place}}{\text{Total \# of sites assessed}} \times 100$$

Data Source—Module IV: MAT			
Indicators	**Numerator**	**Denominator**	**%**
Has written document describing the RHIS mission, roles, and responsibilities that are related to strategic and policy decisions at the district and higher levels	2	7	29%
Has current health service organizational and staff chart showing positions related to health information	1	7	14%
Office has an overall framework and plan for information and communication technology (ICT), for example, describing the required equipment and plans for training in the use of ICT for RHIS	2	7	29%
Office maintains a list/documentation of the dissemination of the RHIS monthly/quarterly reports to the various health program staff in the district, the community, local administration, nongovernmental organizations (NGOs), etc.	5	7	71%

Table 5C.2 RHIS governance—data management guidelines

Indicator: % of sites with RHIS data management guidelines

$$\frac{\text{Total \# of sites with RHIS data management guidelines}}{\text{Total \# of sites assessed}} \times 100$$

Data Source—Module IV: MAT			
Indicators	**Numerator**	**Denominator**	**%**
Has written SOPs and procedural guidelines for RHIS with data definition, data collection and reporting, data aggregation, processing, and transmission, data analysis, dissemination and use, data quality assurance, MFL, ICD classification, data security, and performance improvement process **(Completely)**	0	7	0%
Has written SOPs and procedural guidelines for RHIS with data definition, data collection and reporting, data aggregation, processing, and transmission, data analysis, dissemination and use, data quality assurance, MFL, ICD classification, data security, and performance improvement process **(Partially)**	0	7	0%

Table 5C.3 RHIS planning

RHIS planning

Indicator: % of sites with copies of national HIS documents

$$\frac{\text{Total \# of sites with copies of national HIS documents}}{\text{Total \# of sites assessed}} \times 100$$

Data Source—Module IV: MAT			
Indicators	**Numerator**	**Denominator**	**%**
Has a copy of the national HIS situation analysis/assessment report that is less than three years old	2	7	29%
Has a copy of the national three or five-year HIS strategic plan	2	7	29%

Table 5C.4 Use of quality improvement standards

Use of quality improvement standards

Indicator: % of districts that have RHIS quality improvement standards

$$\frac{\text{Total \# of districts that have RHIS quality improvement standards}}{\text{Total \# of sites assessed}} \times 100$$

Data Source—Module IV: MAT			
Indicator	**Numerator**	**Denominator**	**%**
Has set RHIS performance targets RHIS performance targets for data accuracy for their respective administrative areas	7	7	100%
Has set RHIS performance targets RHIS performance targets for data completeness for their respective administrative areas	7	7	100%
Has set RHIS performance targets RHIS performance targets for data timeliness for their respective administrative areas	5	7	71%

Table 5C.5 Supervision quality

Supervision quality

Indicator: % of districts that have effective supportive supervision practices /tools available to improve RHIS performance

$$\frac{\text{Total \# of sites with documents related to supervision}}{\text{Total \# of sites assessed}} \times 100$$

Data Source—Module IV: MAT			
Indicators	**District**		
	Numerator	**Denominator**	**%**
Office has copies of RHIS supervisory guidelines and checklists	2	7	29%
Office maintains a schedule for RHIS supervisory visits	4	7	57%
Office has copies of the reports from RHIS supervisory visits conducted during the current fiscal year	3	7	43%
HFs that received a supervisory visit have copies of the report from latest supervisory visit and commonly agreed action points are listed	3	7	43%

Table 5C.6 Financial resources to support RHIS activities

Financial resources to support RHIS activities

Indicator: % of districts that allocated financial resources for RHIS activities

$$\frac{\text{Total \# of districts that allocated financial resources for RHIS activities}}{\text{Total \# of sites assessed}} \times 100$$

Data Source—Module IV: MAT			
Indicator	**District**		
	Numerator	**Denominator**	**%**
Office has a copy of the long-term financial plan for supporting RHIS activities	3	7	43%

Table 5C.7 Infrastructure for RHIS data management

Infrastructure for RHIS data management

Indicator: % of sites with Internet connectivity

$$\frac{\text{Total number of sites with available recording and reporting forms}}{\text{Total \# of sites assessed}} \times 100$$

Data Source—Module V: Facility/Office Checklist			
Indicator	**Numerator**	**Denominator**	**%**
Access to an Internet network	*	*	*

* not collected during this EN-MINI-PRISM Tools pilot assessment

Table 5C.8 RHIS supplies for data collection and aggregation—total recording and reporting forms

RHIS supplies for data collection and aggregation

Indicator: Indicator: % of sites with an adequate supply of RHIS recording and reporting forms

$$\frac{\text{Total number of sites with available recording and reporting forms}}{\text{Total \# of sites assessed}} \times 100$$

Data Source: Module 5. Facility/Office Checklist				
Tool Availability	**Tools ID**	**Numerator**	**Denominator**	**%**
Maternal health services				
Maternal health services—Labour and delivery printed register	5.1	*	*	*
Maternal health services—Operation theatre printed register	5.2	*	*	*
Maternal health services—Postnatal ward printed register	5.3	*	*	*
Maternal health services—Printed death register	5.4	*	*	*
Child health services				
Child health services—Postnatal ward printed register	6.1	*	*	*
Child health services—Kangaroo mother care ward/corner printed register	6.2	*	*	*
Child health services—Neonatal inpatient care ward printed register	6.3	*	*	*
Child health services—Special care newborn ward printed register	6.4	*	*	*
Child health services—Intensive care newborn ward printed register	6.5	*	*	*
Child health services—Printed death register	6.6	*	*	*

* not collected during this EN-MINI-PRISM Tools pilot assessment

Table 5C.9 RHIS supplies for data collection and aggregation—standard recording and reporting forms

$$\frac{\text{Total \# of standard RHIS tools available at the facility or office}}{\text{Total \# of tools available at the facility or office}} \times 100$$

Data Source: Module 5. Facility/Office Checklist				
Standard RHIS tool	**Tools ID**	**Numerator**	**Denominator**	**%**
Maternal health services				
Maternal health services—Labour and delivery printed register	5.1	*	*	*
Maternal health services—Operation theatre printed register	5.2	*	*	*
Maternal health services—Postnatal ward printed register	5.3	*	*	*
Maternal health services—Printed death register	5.4	*	*	*
Child health services				
Child health services—Postnatal ward printed register	6.1	*	*	*
Child health services—Kangaroo mother care ward/corner printed register	6.2	*	*	*
Child health services—Neonatal inpatient care ward printed register	6.3	*	*	*
Child health services—Special care newborn ward printed register	6.4	*	*	*
Child health services—Intensive care newborn ward printed register	6.5	*	*	*
Child health services—Printed death register	6.6	*	*	*

* not collected during this EN-MINI-PRISM Tools pilot assessment

Table 5C.10 Facilities or offices with no stock-outs of recording and reporting tools within the past six months

Indicator: % of facilities or offices with no stock-outs of recording and reporting tools within the past six months

$$\frac{\text{Total \# of offices that experienced stockouts in last 6 months}}{\text{Total \# of offices assessed}} \times 100$$

Data Source: Module 5. Facility/Office Checklist				
Stockout	**Tools ID**	**Numerator**	**Denominator**	**%**
Maternal health services				
Maternal health services—Labour and delivery printed register	5.1	*	*	*
Maternal health services—Operation theatre printed register	5.2	*	*	*
Maternal health services—Postnatal ward printed register	5.3	*	*	*
Maternal health services—Printed death register	5.4	*	*	*
Child health services				
Child health services—Postnatal ward printed register	6.1	*	*	*
Child health services—Kangaroo mother care ward/corner printed register	6.2	*	*	*
Child health services—Neonatal inpatient care ward printed register	6.3	*	*	*
Child health services—Special care newborn ward printed register	6.4	*	*	*
Child health services—Intensive care newborn ward printed register	6.5	*	*	*
Child health services—Printed death register	6.6	*	*	*

* not collected during this EN-MINI-PRISM Tools pilot assessment

Table 5C.11 Availability of staff—designated to compile and analyze data

Availability of staff to compile and analyze data

Indicator: % of sites that have designated staff responsible for entering data/compiling reports

$$\frac{\text{Total \# of sites with designated staff responsible for entering data/compiling reports}}{\text{Total \# of sites assessed}} \times 100$$

Data Source—Module IIa: RHIS Performance Diagnostic Tool (District Level)			
Indicator	**Numerator**	**Denominator**	**%**
District has a designated person responsible for entering data/compiling reports from health facilities	6	6	100%

Table 5C.12 Availability of staff—designated for internal data quality review

Indicator: % of sites that have designated staff for internal data quality review

$$\frac{\text{Total number of sites that have designated staff for internal data quality review}}{\text{Total \# of sites assessed}} \times 100$$

Data Source—Module IIa: RHIS Performance Diagnostic Tool (District Level)			
Indicator	**Numerator**	**Denominator**	**%**
District level has a designated person to review the quality of compiled data prior to submission to the next level **(Yes)**	6	6	100%
District level has a designated person to review the quality of compiled data prior to submission to the next level **(Partially)**	0	6	0%

Table 5C.13 Availability of staff—designated for data analysis and dissemination

Indicator: % of sites that have designated staff for data analysis and dissemination

$$\frac{\text{Total \# of sites that have designated staff for data analysis and dissemination}}{\text{Total \# of sites assessed}} \times 100$$

Data Source—Module V: Facility/Office Checklist										
Staff Code	**Title**	**Responsible for data compilation of reports submitted that are coming from the lower levels**			**Responsible for checking the quality of reports submitted from the lower levels**			**Responsible for data analysis (producing comparison tables, graphs, dashboards)**		
		Numerator	**Denominator**	**Ratio**	**Numerator**	**Denominator**	**Ratio**	**Numerator**	**Denominator**	**Ratio**
1	Head of district health office	*	*	*	*	*	*	*	*	*
2	Program officer	*	*	*	*	*	*	*	*	*
3	Disease surveillance officer	*	*	*	*	*	*	*	*	*
4	M&E/HMIS officer	*	*	*	*	*	*	*	*	*
5	Data clerk	*	*	*	*	*	*	*	*	*
96	Other (specify)	*	*	*	*	*	*	*	*	*
Any designated staff		0	*	*	*	*	*	*	*	*

* not collected during this EN-MINI-PRISM Tools pilot assessment

Any designated staff				
Variables		**Numerator**	**Denominator**	**Ratio**
Responsible for data compilation of reports submitted that are coming from the lower levels	Any designated staff	*	*	*
Responsible for checking the quality of reports from the lower level	Any designated staff	*	*	*
Responsible for data analysis	Any designated staff	*	*	*

* not collected during this EN-MINI-PRISM Tools pilot assessment

Table 5C.14 RHIS capacity development—plan

RHIS capacity development

Indicator: % of districts with staff capacity development plan

$$\frac{\text{Total \# of districts with staff capacity development plan}}{\text{Total \# of sites assessed}} \times 100$$

Data Source—Module IV: MAT			
Indicator	**Numerator**	**Denominator**	**%**
Has a costed training and capacity development plan that has benchmarks, timelines, and mechanism for on-the-job RHIS training, RHIS workshops, and orientation for new staff	1	7	14%

Table 5C.15 RHIS capacity development—RHIS training

Indicator: % of staff who have received RHIS training (among those who are responsible for performing various RHIS tasks)

$$\frac{\text{Total \# of staff who have received RHIS training}}{\text{Total \# of staff who are responsible for RHIS tasks } \textit{(one of three denominators possible)}} \times 100$$

Data Source—Module V: Facility/Office Checklist (District)								
Staff Code	**Staff**	**Numerator**	**Among those responsible for data compilation of reports from the lower levels**		**Among those responsible for checking the quality of reports from the lower levels**		**Among those responsible for data analysis (producing comparison tables, graphs, dashboards)**	
			Denominator	**%**	**Denominator**	**%**	**Denominator**	**%**
1	Head of district health office	*	*	*	*	*	*	*
2	Program officer	*	*	*	*	*	*	*
3	Disease surveillance officer	*	*	*	*	*	*	*
4	M&E/HMIS officer	*	*	*	*	*	*	*
5	Data clerk	*	*	*	*	*	*	*
96	Other (specify)	*	*	*	*	*	*	*

* not collected during this EN-MINI-PRISM Tools pilot assessment

Table 5C.16 RHIS capacity development—Received training by type

Total # of staff receiving training by type of training
Total # of staff who are responsible for RHIS tasks *(one of three denominators possible)* X 100

Data Source—Module V: Facility/Office Checklist (District)										
Variables		**Responsible for data compilation of reports from the lower levels**			**Responsible for checking the quality of reports from the lower level**			**Responsible for data analysis**		
		Numerator	**Denominator**	**%**	**Numerator**	**Denominator**	**%**	**Numerator**	**Denominator**	**%**
Subject of last training	Data entry	*	*	*	*	*	*	*	*	*
	Check and verify quality of data	*	*	*	*	*	*	*	*	*
	Generating aggregate reports	*	*	*	*	*	*	*	*	*
	Data analysis and interpretation	*	*	*	*	*	*	*	*	*
	Using data for decision making	*	*	*	*	*	*	*	*	*

* not collected during this EN-MINI-PRISM Tools pilot assessment

Table 5C.17 Commitment and support for high-quality data

Commitment and support for high-quality data

Indicator: Mean score of respondents who perceive that the organization gives due emphasis to data quality

Sum of 3 respondent scores on perceived organizational emphasis on data quality
(Total # of respondents x 5) x 3 X 100

5 being the highest possible score on every answer.
3 being the number of questions asked to calculate this specific indicator.
We assume that the same number of people answered questions S2, S6, and S8.

Data Source—Module VI: OBAT			
	District		
Indicator	**Numerator**	**Denominator**	**%**
Respondent perceives that the organization gives due emphasis to data quality	*	*	*

* not collected during this EN-MINI-PRISM Tools pilot assessment

Table 5C.18 Commitment and support of information use

Commitment and support of information use

Indicator: Mean score of respondents who perceive that the organization supports information use

$$\frac{\text{Sum of 4 respondent scores on perceived organizational support of information use}}{\text{(Total \# of respondents x 5) x 4}} \times 100$$

5 being the highest possible score on every answer.
4 being the number of questions asked to calculate this specific indicator.
We assume that the same number of people answered questions S4, S7, P5, and P8.

Data Source—Module VI: OBAT			
	District		
Indicator	**Numerator**	**Denominator**	**%**
Respondent perceives that the organization supports information use	*	*	*

* not collected during this EN-MINI-PRISM Tools pilot assessment

Table 5C.19 Evidence-based decision making

Evidence-based decision making

Indicator: Mean score of respondents who perceive that the organization promotes a culture of evidence-based decision making

$$\frac{\text{Sum of 9 respondent scores on perceived organizational culture of evidence-based decision making}}{\text{(Total \# of respondents x 5) x 9}} \times 100$$

5 being the highest possible score on every answer.
9 being the number of questions asked to calculate this specific indicator.
We assume that the same number of people answered questions D1 through D9.

Data Source—Module IV: OBAT			
	District		
Indicator	**Numerator**	**Denominator**	**%**
Respondent perceives the organization as promoting a culture of evidence-based decision making	*	*	*

* not collected during this EN-MINI-PRISM Tools pilot assessment

Table 5C.20 Promotion of problem solving

Promotion of problem solving

Indicator: Mean score of respondents who perceive that the organization promotes a culture of problem solving

$$\frac{\text{Sum of 4 respondent scores on perceived organizational promotion of a problem-solving culture}}{\text{Total \# of respondents} \times 5 \times 4} \times 100$$

5 being the highest possible score on every answer.
4 being the number of questions asked to calculate this specific indicator.
We assume that the same number of people answered questions S5, P6, P7, and P9.

Data Source—Module IV: OBAT			
	District		
Indicator	**Numerator**	**Denominator**	**%**
Respondent perceives that the organization promotes a culture of problem solving	*	*	*

* not collected during this EN-MINI-PRISM Tools pilot assessment

Table 5C.21 Sharing information between levels

Sharing information between levels

Indicator: Mean score of respondents who perceive that the organization promotes bidirectional flow of feedback

$$\frac{\text{Sum of 2 respondent scores on perceived organizational promotion of bidirectional flow of feedback}}{(\text{Total \# of respondents} \times 5) \times 2} \times 100$$

5 being the highest possible score on every answer.
2 being the number of questions asked to calculate this specific indicator.
We assume that the same number of people answered questions S1 and S3.

Data Source—Module IV: OBAT			
	District		
Indicator	**Numerator**	**Denominator**	**%**
Respondent perceives that the organization promotes bidirectional flow of feedback	*	*	*

* not collected during this EN-MINI-PRISM Tools pilot assessment

Table 5C.22 Sense of responsibility

Sense of responsibility

Indicator: Mean score of respondents who perceive that the organization has a culture that instills a sense of responsibility

$$\frac{\text{Sum of 5 respondent scores on perceived organizational culture of instilling a sense of responsibility}}{\text{(Total \# of respondents x 5) x 5}} \times 100$$

5 being the highest possible score on every answer.
5 being the number of questions asked to calculate this specific indicator.
We assume the same number of people answered questions P1, P2, P3, P4, and P12.

Data Source—Module IV: OBAT			
	District		
Indicator	**Numerator**	**Denominator**	**%**
Respondent perceives that the organization has a culture that instills a sense of responsibility	*	*	*

* not collected during this EN-MINI-PRISM Tools pilot assessment

Table 5C.23 Empowerment and accountability

Empowerment and accountability

Indicator: Mean score of respondents who perceive that the organization empowers people to ask questions, seek improvement, learn, and improve quality through useful information

$$\frac{\text{Sum of 2 respondent scores on perceived organizational empowering for learning and improvement}}{\text{(Total \# of respondents x 5) x 2}} \times 100$$

5 being the highest possible score on every answer.
2 being the number of questions asked to calculate this specific indicator.
We assume that the same number of people answered questions P10 and P11.

Data Source—Module IV: OBAT			
	District		
Indicator	**Numerator**	**Denominator**	**%**
Respondent perceives that the organization empowers people to ask questions, seek improvement, learn, and improve quality through useful information	*	*	*

* not collected during this EN-MINI-PRISM Tools pilot assessment

Table 5C.24 Rewarding good performance

Rewarding good performance

Indicator: Mean score of respondents who perceive that the organization recognizes and rewards good performance

$$\frac{\text{Sum of respondent scores on perceived organizational recognition and reward of performance}}{\text{Total \# of respondents x 5}} \times 100$$

5 being the highest possible score on every answer.

Data Source—Module IV: OBAT			
	District		
Indicator	**Numerator**	**Denominator**	**%**
Respondent perceives that the organization recognizes and rewards good performance	*	*	*

* not collected during this EN-MINI-PRISM Tools pilot assessment

Table 5C.25 Data quality assurance

Data quality assurance

Indicator: Mean score of level of perceived ability to perform data quality checks

$$\frac{\text{Sum of all self-ratings from 0–10 on ability to perform data quality checks}}{\text{Total \# of respondents X10}} \times 100$$

Data Source—Module IV: OBAT			
	District		
Indicator	**Numerator**	**Denominator**	**%**
Respondent believes that they can check data accuracy	*	*	*

* not collected during this EN-MINI-PRISM Tools pilot assessment

Table 5C.26 Calculating indicators

Calculating indicators

Indicator: Mean score of level of perceived ability to calculate indicators

$$\frac{\text{Sum of all self-ratings from 0–10 on ability to calculate indicators}}{\text{Total \# of respondents X10}} \times 100$$

Data Source—Module IV: OBAT			
	District		
Indicator	**Numerator**	**Denominator**	**%**
Respondent believes that they can calculate percentages/rates correctly	*	*	*

* not collected during this EN-MINI-PRISM Tools pilot assessment

Table 5C.27 Data presentation

Data presentation

Indicator: Mean score of level of perceived ability to prepare data visuals

$$\frac{\text{Sum of all self-ratings from 0–10 on ability to prepare data visuals}}{\text{Total \# of respondents x10}} \text{ X } 100$$

Data Source—Module IV: OBAT			
	District		
Indicator	**Numerator**	**Denominator**	**%**
Respondent believes that they can plot a trend on a chart	*	*	*

* not collected during this EN-MINI-PRISM Tools pilot assessment

Table 5C.28 Data interpretation

Data interpretation

Indicator: Mean score of level of perceived ability to interpret data

$$\frac{\text{Sum of all self-ratings from 0–10 on ability to interpret data}}{\text{Total \# of respondents x10}} \text{ X } 100$$

Data Source—Module IV: OBAT			
	District		
Indicator	**Numerator**	**Denominator**	**%**
Respondent believes that they can explain the implication of the results of the data analysis	*	*	*

* not collected during this EN-MINI-PRISM Tools pilot assessment

Table 5C.29 Use of information

Use of information

Indicator: Mean scores of level of perceived ability to use information for problem-solving or making decisions

$$\frac{\text{Sum of all self-ratings from 0–10 on ability to use information for problem-solving or decision making}}{\text{Total \# of respondents x10}} \times 100$$

Data Source—Module IV: OBAT			
	District		
Indicator	**Numerator**	**Denominator**	**%**
Respondent believes that they can use data for identifying service performance gaps and setting performance targets	*	*	*
Respondent believes that they can use data for making operational/ management decisions	*	*	*
Combined score			*

* not collected during this EN-MINI-PRISM Tools pilot assessment

Table 5C.30 Motivation among staff

The motivation among staff

Indicator: Mean score of Staff motivation level to perform RHIS tasks

$$\frac{\text{Sum of 5 respondent scores on perceived staff motivation to perform RHIS tasks}}{\text{(Total \# of respondents x 5) x 7}} \times 100$$

5 being the highest possible score on every answer.
5 being the number of questions asked to calculate this specific indicator.
We assume that the same number of people answered questions BC1 through BC5.

Indicator	Numerator	Denominator	%
Respondent's motivation to perform RHIS tasks	*	*	*

* not collected during this EN-MINI-PRISM Tools pilot assessment

Table 5C.31 Knowledge of the rationale for RHIS data

Knowledge

Indicator: Mean scores of knowledge of the rationale for RHIS data

$$\frac{\text{Sum of respondent scores on the selected different items}}{\text{Total \# of respondents x 3}} \times 100$$

Data Source—Module IV: OBAT				
		District		
		Numerator	**Denominator**	**%**
Indicator				
Describe at least three reasons for collecting or using the following data on a monthly basis	Newborn diseases/conditions/diagnoses on a monthly basis	*	*	*
	Newborn Immunization	*	*	*
	Maternal age	*	*	*
	Age of newborn	*	*	*
	Geographical data or residence of families	*	*	*
	Why population data is needed	*	*	*
Knowledge of the rationale for RHIS data				*****

* not collected during this EN-MINI-PRISM Tools pilot assessment

Table 5C.32 Knowledge of data quality checking methods

Indicator: Mean scores of knowledge of data quality checking methods

$$\frac{\text{Sum of respondent scores on the selected different items}}{\text{Total \# of respondents x 3}} \times 100$$

Data Source—Module IV: OBAT			
	District		
Questions	**Numerator**	**Denominator**	**%**
Describe at least three aspects of data quality	*	*	*
Describe at least three ways of ensuring data quality relevant to your job classification/responsibilities	*	*	*
Knowledge of data quality checking methods			*****

* not collected during this EN-MINI-PRISM Tools pilot assessment

Table 5C.33 Actual skills to perform RHIS tasks—competence level in calculating indicators

Actual skills to perform RHIS tasks

Indicator: Mean scores of competency level in calculating indicators

$$\frac{\text{Sum of respondent scores on the selected different items}}{\text{Total \# of respondents}} \times 100$$

Data Source—Module IV: OBAT			
	District		
Questions	**Numerator**	**Denominator**	**%**
Calculate the percentage of pregnant mothers at the district level attending antenatal care in the current period	*	*	*
What is the neonatal mortality rate?	*	*	*
Calculate the number of newborns who died	*	*	*
Competence level in calculating indicators			*****

* not collected during this EN-MINI-PRISM Tools pilot assessment

Table 5C.34 Actual skills to perform RHIS tasks—competence level in plotting data/preparing charts

Indicator: Mean score of competency level in plotting data/preparing charts

$$\frac{\text{Sum of respondent scores on the selected different items}}{\text{Total \# of respondents}} \times 100$$

Data Source—Module IV: OBAT			
	District		
Questions	**Numerator**	**Denominator**	**%**
Develop a bar chart depicting the distribution across the maternal ages of newborns with a low birthweight at the four facilities	*	*	*

* not collected during this EN-MINI-PRISM Tools pilot assessment

Table 5C.35 Actual skills to perform RHIS tasks—interpreting data

Indicator: Mean scores of competency level in interpreting data

$$\frac{\text{Sum of respondent scores on the selected different items}}{\text{Total \# of respondents x2}} \times 100$$

Data Source—Module IV: OBAT			
	District		
Scoring	**Numerator**	**Denominator**	**%**
Scoring for **CD2b**: Interpret the graph presented in CD2b	*	*	*
Scoring for CD2c (CD2c1 +CD2c2): Does the district level have the coverage rate (80%) by the end of 2020 for CD2c1? What guidance could you provide on these data for CD2C2?	*	*	*
Competence level in interpreting data			*****

* not collected during this EN-MINI-PRISM Tools pilot assessment

Table 5C.36 Actual skills to perform RHIS tasks—competence level in problem solving

Indicator: Mean scores of competency level in problem solving

$$\frac{\text{Sum of respondent scores on the selected different items}}{\text{Total \# of respondents x n (n=2, 3, or 5)}} \times 100$$

Data Source—Module IV: OBAT			
	District		
Scoring	**Numerator**	**Denominator**	**%**
Scoring for **PSa**: Description of data quality problem	*	*	*
Scoring for **PSb:** Potential reasons for data quality problem	*	*	*
Scoring for **PSc:** Major activities to improve the data quality	*	*	*
Competence level in problem solving			*****

* not collected during this EN-MINI-PRISM Tools pilot assessment

Table 5C.37 Actual skills to perform RHIS tasks—competence level in use of information

Indicator: Mean scores of competency level in use of information

$$\frac{\text{Sum of respondent scores on the selected different items}}{\text{Total \# of respondents}} \times 100$$

Data Source—Module IV: OBAT			
	District		
Scoring	**Numerator**	**Denominator**	**%**
Scoring for **CD2d1**: Provide at least one use of the chart findings at the facility level	*	*	*
Scoring for **CD2d2**: Provide at least one use of the chart findings at the community level	*	*	*
Scoring for CD2d3: Provide at least one use of the chart findings at the district level	*	*	*
Competence level in use of information			*****

* not collected during this EN-MINI-PRISM Tools pilot assessment

Section 5D. Tables: Organizational Factors—Facility Level

D. RHIS Performance Determinants: Organizational Factors-Facility Level

Table 5D.1 Supervision quality

Supervision quality

Indicator: % of districts that have effective supportive supervision to improve RHIS performance

Indicator: % of districts that have effective supportive supervision practices /tools to improve RHIS performance

$$\frac{\text{Sum of site's points}}{\text{Total \# of sites assessed x 6}} \times 100$$

The method to calculate a site's score is outlined below. Add the number of points based on the respondent's answers. These point are your numerator. Numerator scores can range from 1 to 6.

Frequency of district's supervision visits at facilities

Data Source—Module IIb: RHIS Performance Diagnostic Tool (HF Level)				
Indicators		**Numerator**	**Denominator**	**Global score of quality of supervision**
Frequency of district supervisor's visit(s) over the past three months, among the facilities that received supervision visit(s)	>4 times	4	21	19%
	4 times	0	21	0%
	3 times	3	21	14%
	2 times	4	21	19%
	1 time	7	21	33%
Facility did not receive a supervision visit		3	21	14%
% of facilities supervised at least once		18	21	86%

Table 5D.2 Supervision quality—overall score

Data Source—Module IIb: RHIS Performance Diagnostic Tool (HF Level)			
Indicators	**Points to add to numerator**	**Denominator**	**%**
Overall quality of supervision	56	90	62%

Table 5D.3 Supervision quality at facility level—individual and mean scores

Data Source—Module IIb: RHIS Performance Diagnostic Tool (HF Level)			
Indicators	**Numerator**	**Denominator**	**%**
Supervisor checked the data quality	12	18	67%
Supervisor used checklist to assess data quality	7	18	39%
During visit, district supervisor discussed health facility's performance based on RHIS information	17	18	94%
Supervisor helped respondent make a decision or take corrective action based on the discussion	17	18	94%
Supervisor sent a report/written feedback on the last supervisory visit(s)	3	18	17%
Global quality of supervision			62%

Table 5D.4 Infrastructure for RHIS—data management

Infrastructure for RHIS data management

Indicator: % of sites with Internet connectivity

$$\frac{\text{Total number of sites with available recording and reporting forms}}{\text{Total \# of sites assessed}} \times 100$$

Data Source—Module V: Facility/Office Checklist			
Indicator	**Numerator**	**Denominator**	**%**
Access to an internet network	17	21	81%

Table 5D.5 RHIS supplies for data collection and aggregation—total recording and reporting forms

RHIS supplies for data collection and aggregation
Indicator: % of sites with an adequate supply of RHIS recording and reporting forms

$$\frac{\text{Total \# of sites with available recording and reporting forms}}{\text{Total \# of sites assessed}} \times 100$$

Data Source: Module 5. Facility/Office Checklist				
Tool Availability	**Tools ID**	**Numerator**	**Denominator**	**%**
Maternal health services				
Maternal health services—Labour and delivery printed register	5.1	9	21	43%
Maternal health services—Operation theatre printed register	5.2	1	21	5%
Maternal health services—Postnatal ward printed register	5.3	7	21	33%
Maternal health services—Printed death register	5.4	1	21	5%
Child health services				
Child health services—Postnatal ward printed register	6.1	8	21	38%
Child health services—Kangaroo mother care ward/corner printed register	6.2	7	21	33%
Child health services—Neonatal inpatient care ward printed register	6.3	0	21	0%
Child health services—Special care newborn ward printed register	6.4	2	21	10%
Child health services—Intensive care newborn ward printed register	6.5	0	21	0%
Child health services—Printed death register	6.6	2	21	10%

Table 5D.6 RHIS supplies for data collection and aggregation—standard recording and reporting forms

Indicator: % of sites with an adequate supply of standard RHIS recording and reporting forms

$$\frac{\text{Total \# of standard RHIS tools available at the facility or office}}{\text{Total \# of tools available at the facility or office}} \times 100$$

Data Source: Module 5. Facility/Office Checklist				
Standard RHIS tool	**Tools ID**	**Numerator**	**Denominator**	**%**
Maternal health services				
Maternal health services—Labour and delivery printed register	5.1	9	9	100%
Maternal health services—Operation theatre printed register	5.2	1	1	100%
Maternal health services—Postnatal ward printed register	5.3	7	7	100%
Maternal health services—Printed death register	5.4	0	1	0%
Child health services				
Child health services—Postnatal ward printed register	6.1	8	8	100%
Child health services—Kangaroo mother care ward/corner printed register	6.2	7	7	100%
Child health services—Neonatal inpatient care ward printed register	6.3	0	0	
Child health services—Special care newborn ward printed register	6.4	2	2	100%
Child health services—Intensive care newborn ward printed register	6.5	0	0	
Child health services—Printed death register	6.6	2	2	100%

Table 5D.7 Facilities or offices with no stock-outs of recording and reporting tools within the past six months

Indicator: % of facilities or offices with no stock-outs of recording and reporting tools within the past six months

$$\frac{\text{Total \# of offices that experienced no stockouts (always available) in last 6 months}}{\text{Total \# of offices assessed}} \times 100$$

Data Source: Module 5. Facility/Office Checklist				
Stock available	**Tools ID**	**Numerator**	**Denominator**	**%**
Maternal health services				
Maternal health services—Labour and delivery printed register	5.1	21	21	100%
Maternal health services—Operation theatre printed register	5.2	21	21	100%
Maternal health services—Postnatal ward printed register	5.3	21	21	100%
Maternal health services—Printed death register	5.4	21	21	100%
Child health services				
Child health services—Postnatal ward printed register	6.1	21	21	100%
Child health services—Kangaroo mother care ward/corner printed register	6.2	21	21	100%
Child health services—Neonatal inpatient care ward printed register	6.3	21	21	100%
Child health services—Special care newborn ward printed register	6.4	21	21	100%
Child health services—Intensive care newborn ward printed register	6.5	21	21	100%
Child health services—Printed death register	6.6	21	21	100%

Table 5D.8 Availability of staff—Designated to compile and analyze data

Availability of staff to compile and analyze data

Indicator: % of sites that have designated staff responsible for entering data/compiling reports

$$\frac{\text{Total \# of sites with designated staff responsible for entering data/compiling reports}}{\text{Total \# of sites assessed}} \times 100$$

Data Source—Module IIb: RHIS Performance Diagnostic Tool (HF Level)			
Indicator	**Numerator**	**Denominator**	%
A designated person enters data/compiles reports from the different units in the health facility	20	21	95%

Table 5D.9 Availability of staff—designated for internal data quality review

Indicator: % of sites that have designated staff for internal data quality review

$$\frac{\text{Total number of sites that have designated staff for internal data quality review}}{\text{Total \# of sites assessed}} \times 100$$

Data Source—Module IIa: RHIS Performance Diagnostic Tool (District Level)			
Indicator	**Numerator**	**Denominator**	**%**
District level has a designated person to review the quality of compiled data prior to submission to the next level **(Yes)**	13	21	62%
District level has a designated person to review the quality of compiled data prior to submission to the next level **(Partially)**	1	21	5%

Table 5D.10 Availability of staff—designated for data analysis and dissemination

Indicator: % of sites that have designated staff for data analysis and dissemination

$$\frac{\text{Total \# of sites that have designated staff for data analysis and dissemination}}{\text{Total \# of sites assessed}} \times 100$$

Data Source: Module 5. Facility/Office Checklist							
Staff Code	**Title**	**Filling out registers**			**For preparing or completing reports**		
		Numerator	**Denominator**	**%**	**Numerator**	**Denominator**	**%**
1	Medical officer	*	*	*	*	*	*
2	Comprehensive nurse registered	*	*	*	*	*	*
3	Comprehensive nurse enrolled	*	*	*	*	*	*
4	Nursing assistant	*	*	*	*	*	*
5	Clinical officer	*	*	*	*	*	*
6	Laboratory assistant	*	*	*	*	*	*
7	Health assistant	*	*	*	*	*	*
8	Dispenser	*	*	*	*	*	*
9	Health information assistant	*	*	*	*	*	*
10	Health educator	*	*	*	*	*	*
11	Health inspector	*	*	*	*	*	*
12	Laboratory technician	*	*	*	*	*	*
13	Public health dental assistant	*	*	*	*	*	*
14	Anesthetic officer	*	*	*	*	*	*
15	Midwife	*	*	*	*	*	*
16	Support staff	*	*	*	*	*	*
96	Other (specify)	*	*	*	*	*	*

* not collected during this EN-MINI-PRISM Tools pilot assessment

Table 5D.11 Ratio designated staff for data analysis and dissemination per facility

Data Source—Module V: Facility/Office Checklist				
		Facility		
Variables		**Numerator**	**Denominator**	**Ratio**
Someone responsible for filling out registers	Any designated staff	*	*	*
Someone responsible for preparing or completing the HMIS monthly reports	Any designated staff	*	*	*

* not collected during this EN-MINI-PRISM Tools pilot assessment

Table 5D.12 RHIS capacity development—RHIS training

RHIS capacity development

Indicator: % of staff who have received RHIS training (among those who are responsible for performing various RHIS tasks)

$$\frac{\text{Total \# of staff received RHIS training among those responsible for RHIS tasks}}{\text{Total \# of staff who are responsible for RHIS tasks } \textit{(one of two denominators possible)}} \times 100$$

Data Source—Module V: Facility/Office Checklist						
			Among those responsible for filling out registers at facility		**Among those responsible for preparing/ completing monthly HMIS reports**	
Staff Code	**Staff**	**Numerator**	**Denominator 1**	**%**	**Denominator 2**	**%**
1	Medical officer	*	*	*	*	*
2	Comprehensive nurse registered	*	*	*	*	*
3	Comprehensive nurse enrolled	*	*	*	*	*
4	Nursing assistant	*	*	*	*	*
5	Clinical officer	*	*	*	*	*
6	Laboratory assistant	*	*	*	*	*
7	Health assistant	*	*	*	*	*
8	Dispenser	*	*	*	*	*
9	Health information assistant	*	*	*	*	*
10	Health educator	*	*	*	*	*
11	Health inspector	*	*	*	*	*
12	Laboratory technician	*	*	*	*	*
13	Public health dental assistant	*	*	*	*	*
14	Anesthetic officer	*	*	*	*	*
15	Midwife	*	*	*	*	*
16	Support staff	*	*	*	*	*
96	Other (specify)	*	*	*	*	*

* not collected during this EN-MINI-PRISM Tools pilot assessment

Table 5D.13 RHIS capacity development—received training by type

Indicator: % of staff who have received training, by type of training

$$\frac{\text{Total \# of staff receiving training, by type of training}}{\text{Total \# of staff who are responsible for RHIS tasks } \textit{(one of two denominators possible)}} \times 100$$

Data Source—Module V: Facility/Office Checklist							
		Responsible for filling out the registers			Responsible for preparing or completing the HMIS monthly reports		
Variables		Numerator	Denominator	%	Numerator	Denominator	%
Subject of last training	Data collection	*	*	*	*	*	*
	Data analysis	*	*	*	*	*	*
	Data display	*	*	*	*	*	*
	Data reporting	*	*	*	*	*	*
	Using data for decision making	*	*	*	*	*	*

* not collected during this EN-MINI-PRISM Tools pilot assessment

Table 5D.14 Commitment and support for high-quality data

Commitment and support for high-quality data

Indicator: Mean score of respondents who perceive that the organization gives due emphasis to data quality

$$\frac{\text{Sum of 3 respondent scores on perceived organizational emphasis on data quality}}{\text{(Total \# of respondents x 5) x 3}} \times 100$$

5 being the highest possible score on every answer.
3 being the number of questions asked to calculate this specific indicator.
We assume that the same number of people answered questions S2, S6, and S8.

Data Source—Module VI: OBAT			
	Health Facility		
Indicator	Numerator	Denominator	%
Respondent perceives that the organization gives due emphasis to data quality	747	780	96%

Table 5D.15 Commitment and support of information use

Commitment and support of information use

Indicator: Mean score of respondents who perceive that the organization supports information use

$$\frac{\text{Sum of 4 respondent scores on perceived organizational support of information use}}{\text{(Total \# of respondents x 5) x 4}} \times 100$$

5 being the highest possible score on every answer.
4 being the number of questions asked to calculate this specific indicator.
We assume that the same number of people answered questions S4, S7, P5, and P8.

See additional instructions above in section J.

Data Source—Module VI: OBAT			
	Health Facility		
Indicator	**Numerator**	**Denominator**	**%**
Respondent perceives that the organization supports information use	850	1040	82%

Table 5D.16 Evidence-based decision making

Evidence-based decision making

Indicator: Mean score of respondents who perceive that the organization promotes a culture of evidence-based decision making

$$\frac{\text{Sum of 9 respondent scores on perceived organizational culture of evidence-based decision making}}{\text{(Total \# of respondents x 5) x 9}} \times 100$$

5 being the highest possible score on every answer.
9 being the number of questions asked to calculate this specific indicator.
We assume that the same number of people answered questions D1 through D9.

Data Source—Module IV: OBAT			
	Health Facility		
Indicator	**Numerator**	**Denominator**	**%**
Respondent perceives the organization as promoting a culture of evidence-based decision making	1538	2600	59%

Table 5D.17 Promotion of problem solving

Promotion of problem solving **Indicator: Mean score of respondents who perceive that the organization promotes a culture of problem solving** $\frac{\text{Sum of 4 respondent scores on perceived organizational promotion of a problem-solving culture}}{\text{Total \# of respondents x 5 x 4}}$ X 100
5 being the highest possible score on every answer. *4 being the number of questions asked to calculate this specific indicator.* *We assume that the same number of people answered questions S5, P6, P7, and P9.*

See additional instructions above in section J.

Data Source—Module IV: OBAT			
	Health Facility		
Indicator	**Numerator**	**Denominator**	**%**
Respondent perceives that the organization promotes a culture of problem solving	593	1040	57%

Table 5D.18 Sharing information between levels

Sharing information between levels **Indicator: Mean score of respondents who perceive that the organization promotes bidirectional flow of feedback** $\frac{\text{Sum of 2 respondent scores on perceived organizational promotion of bidirectional flow of feedback}}{\text{(Total \# of respondents x 5) x 2}}$ X 100
5 being the highest possible score on every answer. *2 being the number of questions asked to calculate this specific indicator.* *We assume that the same number of people answered questions S1 and S3.*

See additional instructions above in section J.

Data Source—Module IV: OBAT			
	Health Facility		
Indicator	**Numerator**	**Denominator**	**%**
Respondent perceives that the organization promotes bidirectional flow of feedback	464	520	89%

Table 5D.19 Sense of responsibility

Sense of responsibility
Indicator: Mean score of respondents who perceive that the organization has a culture that instills a sense of responsibility

$$\frac{\text{Sum of 5 respondent scores on perceived organizational culture of instilling a sense of responsibility}}{\text{(Total \# of respondents x 5) x 5}} \times 100$$

5 being the highest possible score on every answer.
5 being the number of questions asked to calculate this specific indicator.
We assume the same number of people answered questions P1, P2, P3, P4, and P12.

Data Source—Module IV: OBAT			
	Health Facility		
Indicator	**Numerator**	**Denominator**	**%**
Respondent perceives that the organization has a culture that instills a sense of responsibility	1242	1300	96%

Table 5D.20 Empowerment and accountability

Empowerment and accountability

Indicator: Mean score of respondents who perceive that the organization empowers people to ask questions, seek improvement, learn, and improve quality through useful information

$$\frac{\text{Sum of 2 respondent scores on perceived organizational empowering for learning and improvement}}{\text{(Total \# of respondents x 5) x 2}} \times 100$$

5 being the highest possible score on every answer.
2 being the number of questions asked to calculate this specific indicator.
We assume that the same number of people answered questions P10 and P11.

Data Source—Module IV: OBAT			
	Health Facility		
Indicator	**Numerator**	**Denominator**	**%**
Respondent perceives that the organization empowers people to ask questions, seek improvement, learn, and improve quality through useful information	396	520	76%

Table 5D.21 Rewarding good performance

Rewarding good performance

Indicator: Mean score of respondents who perceive that the organization recognizes and rewards good performance

$$\frac{\text{Sum of respondent scores on perceived organizational recognition and reward of performance}}{\text{Total \# of respondents x 5}} \times 100$$

5 being the highest possible score on every answer.

Data Source—Module IV: OBAT			
	Health Facility		
Indicator	**Numerator**	**Denominator**	**%**
Respondent perceives that the organization recognizes and rewards good performance	236	260	91%

Table 5D.22 Data quality assurance

Data quality assurance

Indicator: Mean score of level of perceived ability to perform data quality checks

$$\frac{\text{Sum of all self-ratings from 0–10 on ability to perform data quality checks}}{\text{Total \# of respondents X10}} \times 100$$

Data Source—Module IV: OBAT			
	Health Facility		
Indicator	**Numerator**	**Denominator**	**%**
Respondent believes that they can check data accuracy	475	520	91%

Table 5D.23 Calculating indicators

Calculating indicators

Indicator: Mean score of level of perceived ability to calculate indicators

$$\frac{\text{Sum of all self-ratings from 0–10 on ability to calculate indicators}}{\text{Total \# of respondents x10}} \times 100$$

Data Source—Module IV: OBAT			
	Health Facility		
Indicator	**Numerator**	**Denominator**	**%**
Respondent believes that they can calculate percentages/rates correctly	448	520	86%

Table 5D.24 Data presentation

Data presentation

Indicator: Mean score of level of perceived ability to prepare data visuals

$$\frac{\text{Sum of all self-ratings from 0–10 on ability to prepare data visuals}}{\text{Total \# of respondents x10}} \times 100$$

Data Source—Module IV: OBAT			
	Health Facility		
Indicator	**Numerator**	**Denominator**	**%**
Respondent believes that they can plot a trend on a chart	332	520	64%

Table 5D.25 Data interpretation

Data interpretation

Indicator: Mean score of level of perceived ability to interpret data

$$\frac{\text{Sum of all self-ratings from 0–10 on ability to interpret data}}{\text{Total \# of respondents x10}} \times 100$$

Data Source—Module IV: OBAT			
	Health Facility		
Indicator	**Numerator**	**Denominator**	**%**
Respondent believes that they can explain the implication of the results of the data analysis	398	520	77%

Table 5D.26 Use of information

Use of information

Indicator: Mean scores of level of perceived ability to use information for problem-solving or making decisions

$$\frac{\text{Sum of all self-ratings from 0–10 on ability to use information for problem-solving or decision making}}{\text{Total \# of respondents x10}} \times 100$$

Data Source—Module IV: OBAT			
	Health Facility		
Indicator	**Numerator**	**Denominator**	**%**
Respondent believes that they can use data for identifying service performance gaps and setting performance targets	299	520	58%
Respondent believes that they can use data for making operational/ management decisions	391	520	75%
Combined score			66%

Table 5D.27 The motivation among staff

The motivation among staff

Indicator: Mean score of Staff motivation level to perform RHIS tasks

$$\frac{\text{Sum of 5 respondent scores on perceived staff motivation to perform RHIS tasks}}{\text{(Total \# of respondents x 5) x 7}} \times 100$$

5 being the highest possible score on every answer.
5 being the number of questions asked to calculate this specific indicator.
We assume that the same number of people answered questions BC1 through BC5.

Indicator	Numerator	Denominator	%
Respondent's motivation to perform RHIS tasks	1280	1820	70%

Table 5D.28 Knowledge

Knowledge

Indicator: Mean scores of knowledge of the rationale for RHIS data

$$\frac{\text{Sum of respondent scores on the selected different items}}{\text{Total \# of respondents x 3}} \times 100$$

Data Source—Module IV: OBAT				
		Health Facility		
		Numerator	Denominator	%
Indicator				
Describe at least three reasons for collecting or using the following data on a monthly basis	Newborn diseases/ conditions/ diagnoses on a monthly basis	104	156	67%
	Newborn Immunization	82	156	53%
	Maternal age	94	156	60%
	Age of newborn	94	156	60%
	Geographical data or residence of families	92	156	59%
	Why population data is needed	53	156	34%
Knowledge of the rationale for RHIS data				**55%**

Table 5D.29 Knowledge of data quality checking methods

Indicator: Mean scores of knowledge of data quality checking methods

$$\frac{\text{Sum of respondent scores on the selected different items}}{\text{Total \# of respondents x 3}} \times 100$$

Data Source—Module IV: OBAT			
	Health Facility		
Questions	**Numerator**	**Denominator**	**%**
Describe at least three aspects of data quality	74	156	47%
Describe at least three ways of ensuring data quality relevant to your job classification/ responsibilities	45	156	29%
Knowledge of data quality checking methods			**38%**

Table 5D.30 Actual skills to perform RHIS tasks—competence level in calculating indicators

Actual skills to perform RHIS tasks

Indicator: Competence level in calculating indicators

Data Source—Module VI: OBAT			
	Health Facility		
	Numerator	**Denominator**	**%**
Calculate the % of eligible newborns receiving KMC (head of the facility)	7	52	13%
What is the neonatal mortality rate—boys? (head of the facility)	6	52	12%
What is the neonatal mortality rate—girls? (head of the facility)	6	52	12%
What is the neonatal mortality rate? (agents)	8	52	15%
Calculate the number of newborns who died (agent)	11	52	21%
Competence level in calculating indicators			**15%**

Table 5D.31 Actual skills to perform RHIS tasks—competence level in plotting data/preparing charts

Indicator: Competence level in plotting data/preparing charts

Scoring for CS2a: Correct presentation of the line graph gets one point. Wrong answers (or no answers) get a score of zero.

Data Source—Module VI: OBAT			
	Facility		
Question	**Numerator**	**Denominator**	**%**
Develop a line graph depicting the trend over one year of KMC coverage among eligible babies born at X health facility	11	52	21%

Table 5D.32 Actual skills to perform RHIS tasks—competence level interpreting data

Indicator: Competence level in interpreting data

Data Source—Module VI: OBAT			
	Numerator	**Denominator**	**%**
Scoring for **CF2b**: What the graph tells you	14	104	13%
Scoring for **CF2c**: Calculate target	14	104	13%
Scoring for **CS2b**: Interpret a graph	36	104	35%
Scoring for **CS2c**: Pointing out specificity of a graph, trend, or irregularity	12	52	23%
Competence level in interpreting data			**21%**

Table 5D.33 Actual skills to perform RHIS tasks—competence level in problem solving (individual)

Indicator: Competence level in problem solving (individual)

Data Source—Module VI: OBAT			
	Numerator	**Denominator**	**%**
Scoring for **PSa**: Description of data quality problem	51	104	49%
Scoring for **PSb:** Potential reasons for data quality problem	118	156	76%
Scoring for **PSc:** Major activities to improve the data quality	123	260	47%
Competence level in problem solving			**57%**

Table 5D.34 Actual skills to perform RHIS tasks—competence level in problem solving (group)

Indicator: Competence level in problem solving (group)

Data Source—Module VI: OBAT			
	Numerator	**Denominator**	**%**
Scoring for **PSb-X1:** Potential reasons for data quality problem	*	*	*
Scoring for **PSc-X2:** Major activities to improve the data quality	*	*	*
Competence level in problem solving			*

* not collected during this EN-MINI-PRISM Tools pilot assessment

Table 5D.35 Actual skills to perform RHIS tasks—competence level in use of information

Indicator: Competence level in use of information

Data Source—Module VI: OBAT			
	Numerator	**Denominator**	**%**
Scoring for **CS2d1**: Provide at least one use of chart findings at the facility level.	7	52	13%
Scoring for **CS2d2**: Provide at least one use of chart findings at the community level.	7	52	13%
Scoring for CS2d1: Provide at least one use of chart findings at the facility level.	14	52	27%
Scoring for CS2d2: Provide at least one use of chart findings at the community level.	11	52	21%
Competence level in use of information			**19%**

5E. Summary Tables for Organizational Factors

Table 5E.1 Summary Tables for Organizational Factors—Overall

			Central			Regional			District			Facility		
Domain	**Indicator**		**Numerator**	**Denominator**	**%**	**Numerator**	**Denominator**	**%**	**Numerator**	**Denominator**	**%**	**Numerator**	**Denominator**	**%**
RHIS governance	Good RHIS governance structures in place	Has a written document describing the RHIS mission, roles, and responsibilities that are related to strategic and policy decisions at central and higher levels	*	*	*	*	*	*	2	7	29%			
		Has current health service organizational and staff charts showing positions related to health information	*	*	*	*	*	*	1	7	14%			
		Has overall framework and plan for information and communication technology (ICT), (e.g., describing the required equipment and plans for training in the use of ICT for RHIS)	*	*	*	*	*	*	2	7	29%			
		Office maintains documentation of the dissemination of the RHIS monthly/ quarterly reports to the various health program staff at the central level, the community, local administration, NGOs, etc.	*	*	*	*	*	*	5	7	71%			
	Existence of RHIS data management guidelines	Has written SOPs and procedural guidelines for RHIS with data definition, data collection and reporting, data aggregation, processing, and transmission, data analysis, dissemination and use, data quality assurance, MFL, ICD classification, data security, and performance improvement process (Completely)	*	*	*	*	*	*	2	7	29%			

			Central			Regional			District			Facility		
Domain	**Indicator**		**Numerator**	**Denominator**	**%**	**Numerator**	**Denominator**	**%**	**Numerator**	**Denominator**	**%**	**Numerator**	**Denominator**	**%**
		Has written SOPs and procedural guidelines for RHIS with data definition, data collection and reporting, data aggregation, processing, and transmission, data analysis, dissemination and use, data quality assurance, MFL, ICD classification, data security, and performance improvement process (Partially)	*	*	*	*	*	*	1	7	14%			
RHIS planning	% of sites with copies of national HIS documents	Has a copy of the national HIS situation analysis/assessment report that is less than three years old	*	*	*	*	*	*	2	7	29%			
		Has a copy of the national three or five-year HIS strategic plan	*	*	*	*	*	*	5	7	71%			
Use of quality improvement standards	% of sites that have RHIS quality improvement standards	Has set RHIS performance targets RHIS performance targets for data accuracy for their respective administrative areas	*	*	*	*	*	*	0	7	0%			
		Has set RHIS performance targets RHIS performance targets for data completeness for their respective administrative areas	*	*	*	*	*	*	0	7	0%			
		Has set RHIS performance targets RHIS performance targets for data timeliness for their respective administrative areas	*	*	*	*	*	*	2	7	29%			

			Central			Regional			District			Facility		
Domain	**Indicator**		**Numerator**	**Denominator**	**%**	**Numerator**	**Denominator**	**%**	**Numerator**	**Denominator**	**%**	**Numerator**	**Denominator**	**%**
Supervision quality	Existence effective supportive supervision practices /tools availability to improve RHIS performance	Office has copies of RHIS supervisory guidelines and checklists	*	*	*	*	*	*	2	7	29%			
		Office maintains a schedule for RHIS supervisory visits	*	*	*	*	*	*	7	7	100%			
		Office has copies of the reports from RHIS supervisory visits conducted during the current fiscal year	*	*	*	*	*	*	7	7	100%			
		HFa that received a supervisory visit have copies of the report from latest supervisory visit and commonly agreed action points are listed	*	*	*	*	*	*	5	7	71%			
	% of districts that have effective supportive supervision to improve RHIS performance	Frequency of district supervisor's visit(s) over the past three months, among the facilities that received supervision visit(s) >4 times										4	21	19%
		Frequency of district supervisor's visit(s) over the past three months, among the facilities that received supervision visit(s) 4 times										0	21	0%
		Frequency of district supervisor's visit(s) over the past three months, among the facilities that received supervision visit(s) 3 times										3	21	14%
		Frequency of district supervisor's visit(s) over the past three months, among the facilities that received supervision visit(s) 2 times										4	21	19%

			Central			Regional			District			Facility		
Domain	Indicator		Numerator	Denominator	%	Numerator	Denominator	%	Numerator	Denominator	%	Numerator	Denominator	%
		Frequency of district supervisor's visit(s) over the past three months, among the facilities that received supervision visit(s) 1 time										7	21	33%
		Facility did not receive a supervision visit										3	21	14%
		% of facilities supervised at least once										18	21	86%
	Quality of Supervision	Supervisor checked the data quality										12	18	67%
		Supervisor used checklist to assess data quality										7	18	39%
		During visit, district supervisor discussed health facility's performance based on RHIS information										17	18	94%
		Supervisor helped respondent make a decision or take corrective action based on the discussion										17	18	94%
		Supervisor sent a report/written feedback on the last supervisory visit(s)										3	18	17%
		Overall quality of supervision										56	90	62%

			Central			Regional			District			Facility		
Domain	**Indicator**		**Numerator**	**Denominator**	**%**	**Numerator**	**Denominator**	**%**	**Numerator**	**Denominator**	**%**	**Numerator**	**Denominator**	**%**
Financial resources to support RHIS activities	Existence of financial resource allocation for RHIS activities	Office has a copy of the long-term financial plan for supporting RHIS activities	*	*	*	*	*	*	3	7	43%			
Infrastructure for RHIS data management	Existence of Internet connectivity	Access to an Internet network	*	*	*	*	*	*	*	*	*	17	21	81%
RHIS supplies for data collection and aggregation	Existence of adequate supply of RHIS recording/ reporting forms at the central level	Maternal health services—Labour and delivery printed register	*	*	*	*	*	*	*	*	*	9	21	43%
		Maternal health services—Operation theatre printed register	*	*	*	*	*	*	*	*	*	1	21	5%
		Maternal health services—Postnatal ward printed register	*	*	*	*	*	*	*	*	*	7	21	33%
		Maternal health services—Printed death register	*	*	*	*	*	*	*	*	*	1	21	5%
		Child health services—Postnatal ward printed register	*	*	*	*	*	*	*	*	*	8	21	38%
		Child health services—Kangaroo mother care ward/corner printed register	*	*	*	*	*	*	*	*	*	7	21	33%
		Child health services—Neonatal inpatient care ward printed register	*	*	*	*	*	*	*	*	*	0	21	0%

			Central			Regional			District			Facility		
Domain	Indicator		Numerator	Denominator	%	Numerator	Denominator	%	Numerator	Denominator	%	Numerator	Denominator	%
		Child health services—Special care newborn ward printed register	*	*	*	*	*	*	*	*	*	2	21	10%
		Child health services—Intensive care newborn ward printed register	*	*	*	*	*	*	*	*	*	0	21	0%
		Child health services—Printed death register	*	*	*	*	*	*	*	*	*	2	21	10%
	Existence of adequate supply of standard RHIS recording/ reporting forms at the central level	Maternal health services—Labour and delivery printed register	*	*	*	*	*	*	*	*	*	9	9	100%
		Maternal health services—Operation theatre printed register	*	*	*	*	*	*	*	*	*	1	1	100%
		Maternal health services—postnatal ward printed register	*	*	*	*	*	*	*	*	*	7	7	100%
		Maternal health services—Printed death register	*	*	*	*	*	*	*	*	*	0	1	0%
		Child health services—Postnatal ward printed register	*	*	*	*	*	*	*	*	*	8	8	100%
		Child health services—Kangaroo mother care ward/corner printed register	*	*	*	*	*	*	*	*	*	7	7	100%
		Child health services—Neonatal inpatient care ward printed register	*	*	*	*	*	*	*	*	*	0	0	0%
		Child health services—Special care newborn ward printed register	*	*	*	*	*	*	*	*	*	2	2	100%

			Central			Regional			District			Facility		
Domain	Indicator		Numerator	Denominator	%	Numerator	Denominator	%	Numerator	Denominator	%	Numerator	Denominator	%
		Child health services—Intensive care newborn ward printed register	*	*	*	*	*	*	*	*	*	0	0	0%
		Child health services—Printed death register	*	*	*	*	*	*	*	*	*	2	2	100%
	Experienced no stock-outs in last 6 months	Maternal health services—Labour and delivery printed register	*	*	*	*	*	*	*	*	*	0	21	0%
		Maternal health services—Operation theatre printed register	*	*	*	*	*	*	*	*	*	0	21	0%
		Maternal health services—Postnatal ward printed register	*	*	*	*	*	*	*	*	*	0	21	0%
		Maternal health services—Printed death register	*	*	*	*	*	*	*	*	*	0	21	0%
		Child health services—Postnatal ward printed register	*	*	*	*	*	*	*	*	*	0	21	0%
		Child health services—Kangaroo mother care ward/corner printed register	*	*	*	*	*	*	*	*	*	0	21	0%
		Child health services—Neonatal inpatient care ward printed register	*	*	*	*	*	*	*	*	*	0	21	0%
		Child health services—Special care newborn ward printed register	*	*	*	*	*	*	*	*	*	0	21	0%
		Child health services—Intensive care newborn ward printed register	*	*	*	*	*	*	*	*	*	0	21	0%

			Central			Regional			District			Facility		
Domain	**Indicator**		**Numerator**	**Denominator**	**%**	**Numerator**	**Denominator**	**%**	**Numerator**	**Denominator**	**%**	**Numerator**	**Denominator**	**%**
		Child health services—Printed death register	*	*	*	*	*	*	*	*	*	0	21	0%
Availability of staff to compile and analyze data	Existence of designated staff responsible for compiling reports	Site level has a designated person responsible for entering data/compiling reports from health facilities	*	*	*	*	*	*	6	6	100%	20	21	95%
	Existence of designated staff for internal data quality review	Site level has a designated person to review the quality of compiled data prior to submission to the next level (Yes)	*	*	*	*	*	*	6	6	100%	13	21	62%
		Site level has a designated person to review the quality of compiled data prior to submission to the next level (Partially)	*	*	*	*	*	*	0	6	0%	1	21	5%

			Central			Regional			District			Facility		
Domain	**Indicator**		**Numerator**	**Denominator**	**Ratio**	**Numerator**	**Denominator**	**Ratio**	**Numerator**	**Denominator**	**Ratio**	**Numerator**	**Denominator**	**Ratio**
Availability of staff to analyze and disseminate data	Existence of designated staff for data analysis and dissemination at the level	Responsible for data analysis	*	*	*	*	*	*	*	*	*			
		Responsible for checking the quality of reports from the lower level	*	*	*	*	*	*	*	*	*			
		Responsible for data compilation of reports submitted that are coming from the lower levels	*	*	*	*	*	*	*	*	*			
		for preparing or completing the RHIS monthly reports										*	*	*

		Responsible for filling out registers											*	*	*

			Central			Regional			District			Facility		
	Indicator		**Numerator**	**Denominator**	**%**	**Numerator**	**Denominator**	**%**	**Numerator**	**Denominator**	**%**	**Numerator**	**Denominator**	**%**
RHIS capacity development	Existence of staff capacity development plan at the site level	Has a costed training and capacity development plan that has benchmarks, timelines, and mechanism for on-the-job RHIS training, RHIS workshops, and orientation for new staff	*	*	*	*	*	*	1	7	14%			
	% of staff who are responsible for filling out registers who have received RHIS training	Received any RHIS training										*	*	*
		Received training on data collection										*	*	*
	% of staff	Received any RHIS training										*	*	*

			Central			Regional			District			Facility		
	Indicator		**Numerator**	**Denominator**	**%**	**Numerator**	**Denominator**	**%**	**Numerator**	**Denominator**	**%**	**Numerator**	**Denominator**	**%**
	responsible for preparing or completing the RHIS monthly reports who have received RHIS training	Received training on data reporting										*	*	*
	% of staff responsible for data compilation of reports from the lower levels who have received RHIS training	Received any RHIS training	*	*	*	*	*	*	*	*	*			
		Received training on data aggregation	*	*	*	*	*	*	*	*	*			
	% of staff	Received any RHIS training	*	*	*	*	*	*	*	*	*			

			Central			Regional			District			Facility		
	Indicator		Numerator	Denominator	%	Numerator	Denominator	%	Numerator	Denominator	%	Numerator	Denominator	%
	responsible for checking the quality of reports from the lower levels from the lower levels who have received RHIS training	Received training on check and verify quality of data	*	*	*	*	*	*	*	*	*			
	% of staff responsible for data analysis (producing comparison tables, graphs, dashboards) who have received RHIS training	Received any RHIS training	*	*	*	*	*	*	*	*	*			
		Received training on data analysis and interpretation	*	*	*	*	*	*	*	*	*			

Promotion of an information culture

		Central			Regional			District			Facility		
Domain	**Indicator**	**Numerator**	**Denominator**	**%**	**Numerator**	**Denominator**	**%**	**Numerator**	**Denominator**	**%**	**Numerator**	**Denominator**	**%**
Commitment and support for high-quality data	Respondent perceives that the organization gives due emphasis to data quality	*	*	*	*	*	*	*	*	*	747	780	96%
Commitment and support of information use	Respondent perceives that the organization supports information use	*	*	*	*	*	*	*	*	*	850	1040	82%
Evidence-based decision making	Respondent perceives the organization as promoting a culture of evidence-based decision making	*	*	*	*	*	*	*	*	*	1538	2600	59%
Promotion of problem solving	Respondent perceives that the organization promotes a culture of problem solving	*	*	*	*	*	*	*	*	*	593	1040	57%
Sharing information between levels	Respondent perceives that the organization promotes bidirectional flow of feedback	*	*	*	*	*	*	*	*	*	464	520	89%
Sense of responsibility	Respondent perceives that the organization has a culture that instills a sense of responsibility	*	*	*	*	*	*	*	*	*	1242	1300	96%
Empowerment and accountability	Respondent perceives that the organization empowers people to ask questions, seek improvement, learn, and improve quality through useful information	*	*	*	*	*	*	*	*	*	396	520	76%
Rewarding good performance	Respondent perceives that the organization recognizes and rewards good performance	*	*	*	*	*	*	*	*	*	236	260	91%

Individual skills and behavior

Self-perception confidence in RHIS tasks			Central			Regional			District			Facility		
Domain	**Indicator**		**Numerator**	**Denominator**	**%**	**Numerator**	**Denominator**	**%**	**Numerator**	**Denominator**	**%**	**Numerator**	**Denominator**	**%**
Data quality assurance	Respondent believes that they can check data accuracy		*	*	*	*	*	*	*	*	*	403	560	72%
Calculating indicators	Respondent believes that they can calculate percentages/rates correctly		*	*	*	*	*	*	*	*	*	372	560	66%
Data presentation	Respondent believes that they can plot a trend on a chart		*	*	*	*	*	*	*	*	*	362	560	65%
Data interpretation	Respondent believes that they can explain the implication of the results of the data analysis		*	*	*	*	*	*	*	*	*	392	560	70%
Use of information	Mean scores of level of perceived ability to use information for problem-solving or making decisions	Respondent believes that they can use data for identifying service performance gaps and setting performance targets	*	*	*	*	*	*	*	*	*	393	560	70%
		Respondent believes that they can use data for making operational/ management decisions	*	*	*	*	*	*	*	*	*	225	560	40%
		Combined score	*	*	*	*	*	*	*	*	*			**55%**

Knowledge of the RHIS			Central			Regional			District			Facility		
Domain	**Indicator**		**Numerator**	**Denominator**	**%**	**Numerator**	**Denominator**	**%**	**Numerator**	**Denominator**	**%**	**Numerator**	**Denominator**	**%**
Knowledge rationale RHIS Data	Describe at least three reasons for collecting or using the following data on a monthly basis	Newborn diseases/ conditions/ diagnoses on a monthly basis	*	*	*	*	*	*	*	*	*	104	156	67%
		Newborn Immunization	*	*	*	*	*	*	*	*	*	82	156	53%
		Maternal age	*	*	*	*	*	*	*	*	*	94	156	60%
		Age of newborn	*	*	*	*	*	*	*	*	*	94	156	60%
		Geographical data or residence of families	*	*	*	*	*	*	*	*	*	92	156	59%
		Why population data is needed	*	*	*	*	*	*	*	*	*	53	156	34%
	Mean score of knowledge of the rationale for RHIS data	**Combined score**	*	*	*	*	*	*	*	*	*			**55%**
Knowledge Data quality checking methods	Describe at least three aspects of data quality		*	*	*	*	*	*	*	*	*	74	156	47%
	Describe at least three ways of ensuring data quality relevant to your job classification/ responsibilities		*	*	*	*	*	*	*	*	*	45	156	29%
	Mean scores of knowledge of data quality checking methods		*	*	*	*	*	*	*	*	*			**38%**

Skills to perform RHIS tasks		Central			Regional			District			Facility		
Domain	**Indicator**	**Numerator**	**Denominator**	**%**	**Numerator**	**Denominator**	**%**	**Numerator**	**Denominator**	**%**	**Numerator**	**Denominator**	**%**

Skills to perform RHIS tasks			Central			Regional			District			Facility		
Domain	**Indicator**		**Numerator**	**Denominator**	**%**	**Numerator**	**Denominator**	**%**	**Numerator**	**Denominator**	**%**	**Numerator**	**Denominator**	**%**
Actual skills to perform RHIS tasks	Competence level in calculating indicators	Calculate the percentage of pregnant mothers at the central level attending antenatal care in the current period	*	*	*	*	*	*	*	*	*			
		Calculate the % of eligible newborns receiving KMC (head of the facility)	*	*	*	*	*	*	*	*	*	7	52	13%
		What is the neonatal mortality rate—boys? (head of the facility)	*	*	*	*	*	*	*	*	*	6	52	12%
		What is the neonatal mortality rate—girls? (head of the facility)	*	*	*	*	*	*	*	*	*	6	52	12%
		What is the neonatal mortality rate? (agents)	*	*	*	*	*	*	*	*	*	8	52	15%
		Calculate the number of newborns who died (agent)	*	*	*	*	*	*	*	*	*	11	52	21%
		Combined score	*	*	*	*	*	*	*	*	*			**15%**

Skills to perform RHIS tasks			Central			Regional			District			Facility		
Domain	**Indicator**		**Numerator**	**Denominator**	**%**	**Numerator**	**Denominator**	**%**	**Numerator**	**Denominator**	**%**	**Numerator**	**Denominator**	**%**
	Competence level in plotting data/preparing charts	Develop a bar chart depicting the distribution across the maternal ages of newborns with a low birthweight at the four facilities.	*	*	*	*	*	*	*	*	*			
		Develop a line graph depicting the trend over one year of KMC coverage among eligible babies born at X health facility										11	52	21%
	Competence level in interpreting data	Scoring for graph 2b: What the graph tells you	*	*	*	*	*	*	*	*	*	14	104	13%
		Scoring for graph 2c: Calculate target	*	*	*	*	*	*	*	*	*	14	104	13%
		Scoring for graph 2b: Interpret a graph										36	104	35%
		Scoring for graph 2c: Pointing out specificity of a graph, trend, or irregularity										12	52	23%

Skills to perform RHIS tasks			Central			Regional			District			Facility		
Domain	**Indicator**		**Numerator**	**Denominator**	**%**	**Numerator**	**Denominator**	**%**	**Numerator**	**Denominator**	**%**	**Numerator**	**Denominator**	**%**
		Combined score	*	*	*	*	*	*	*	*	*			**21%**
	Competence level in problem solving	Scoring for PSa: Description of data quality problem	*	*	*	*	*	*	*	*	*	51	104	49%
		Scoring for PSb: Potential reasons for data quality problem	*	*	*	*	*	*	*	*	*	118	156	76%
		Scoring for PSc: Major activities to improve the data quality	*	*	*	*	*	*	*	*	*	123	260	47%
		Combined score	*	*	*	*	*	*	*	*	*			**57%**
	Competence level in use of information	Scoring for 2d1: Provide at least one use of chart findings at the facility level.	*	*	*	*	*	*	*	*	*	14	52	27%
		Scoring for 2d2: Provide at least one use of chart findings at the community level.	*	*	*	*	*	*	*	*	*	11	52	21%
		Scoring for 2d2: Provide at least one use of chart findings at the central/ district level.	*	*	*	*	*	*	*	*	*			

Skills to perform RHIS tasks			Central			Regional			District			Facility		
Domain	Indicator		Numerator	Denominator	%	Numerator	Denominator	%	Numerator	Denominator	%	Numerator	Denominator	%
		Combined score	*	*	*	*	*	*	*	*	*			19%

Motivation		Central			Regional			District			Facility		
Domain	Indicator	Numerator	Denominator	%	Numerator	Denominator	%	Numerator	Denominator	%	Numerator	Denominator	%
The motivation among staff	Respondent's motivation to perform RHIS tasks	*	*	*	*	*	*	*	*	*	1280	1820	**70%**

6. Gender Indicators

6A. Gender Factors—Central Level

Section 6A. Tables: Gender Factors—Central Level

Gender Indicators: Central Level

Table 6A.1 System capturing gender disaggregated data

A. System capturing gender disaggregated data

Indicator: eRHIS capturing data disaggregated by sex

Data Source—Module III: eRHIS Assessment Tool			
Indicator	**Numerator**	**Denominator**	**%**
RHIS software captures data disaggregated by sex	2	2	100%

Table 6A.2 Analysis of data by gender

B. Analysis of data by gender

Indicator: existence of practice of carrying out gender analysis

$$\frac{\text{Total \# of sites (0 or 1) carrying out gender analysis)}}{\text{Total \# of sites assessed (=1)}} \times 100$$

Data Source—Module IIa: RHIS Performance Diagnostic Tool (Central Level)			
Indicator	**Numerator**	**Denominator**	**%**
Up-to-date documents containing comparisons of sex-disaggregated data were shown	*	*	*

* not collected during this EN-MINI-PRISM Tools pilot assessment

Table 6A.3 Use of gender disaggregated data for decision making and planning

C. Use of gender disaggregated data for decision making and planning

Indicator: % of sites using gender disaggregated data for decision making

$$\frac{\text{Total \# of sites (0 or 1) using gender disaggregated data for decision-making}}{\text{Total \# of sites assessed (=1)}} \times 100$$

Data Source—Module IIa: RHIS Performance Diagnostic Tool (Central Level)			
Indicators	**Numerator**	**Denominator**	**%**
Reports and/or bulletins contain discussions and decisions based on key performance targets based on RHIS sex-disaggregated data	*	*	*
Discussions were held to review key performance targets based on RHIS sex disaggregated data	*	*	*
Decisions were made based on the discussion of the district and/or health facility's performance regarding reducing the gender gap in the provision of health services	*	*	*
Annual plan exists and contains activities and/or targets related to improving or addressing gender disparity in health services coverage	*	*	*

* not collected during this EN-MINI-PRISM Tools pilot assessment

Table 6A.4 Use of gender disaggregated data—identify and address gender disparities in service delivery

Indicator: % of respondents who perceive that the organization emphasizes the need to use RHIS to identify and address gender disparities in service delivery

$$\frac{\text{Sum of respondent score on perceived emphasis in data use to address gender inequity}}{\text{5 being the highest possible score on every answer}} \times 100$$

Data Source—Module VI: OBAT			
Indicators	**Numerator**	**Denominator**	**%**
Respondent perceives that superiors in the health department emphasize the need to use RHIS data to identify potential gender-related disparities in service delivery or use	*	*	*
Respondent perceives that staff in the health department use sex-disaggregated or gender-sensitive RHIS data to identify and/or solve gender-related problems in service delivery	*	*	*

* not collected during this EN-MINI-PRISM Tools pilot assessment

Table 6A.5 Percentage of respondents able to show age and sex disaggregation for an indicator

Indicator: % of respondents able to show age and sex disaggregation for an indicator

$$\frac{\text{Total \# of respondents able to show age- and sex-disaggregation for an indicator}}{\text{Total \# of respondents}} \times 100$$

Data Source: Module 3. eRHIS Assessment Tool			
Indicator	**Numerator**	**Denominator**	**%**
Respondent can show age and sex disaggregation for the selected indicator	*	*	*

* not collected during this EN-MINI-PRISM Tools pilot assessment

Table 6A.6 Percentage of respondents describe importance of age and sex disaggregation for an indicator

Data Source—Module VI: OBAT			
Indicators	**Numerator**	**Denominator**	**%**
Describes information acquired by disaggregating the data by sex and how it helps in planning/improving service delivery	*	*	*
Describe at least three reasons for collecting, or uses of, data on a monthly basis on sex of patients	*	*	*

* not collected during this EN-MINI-PRISM Tools pilot assessment

6B. Gender Factors—Regional Level

Section 6B. Tables: Gender Factors—Regional Level

Gender Indicators: Regional Level

Table 6B.1 System capturing gender disaggregated data

A. System capturing gender-disaggregated data

Indicator: eRHIS capturing data disaggregated by sex

Data Source—Module III: eRHIS Assessment Tool			
Indicator	**Numerator**	**Denominator**	**%**
RHIS software captures data disaggregated by sex	*	*	*

* not collected during this EN-MINI-PRISM Tools pilot assessment

Table 6B.2 Analysis of data by gender

B. Analysis of data by gender

Indicator: % of sites carrying out gender analysis

$$\frac{\text{Total \# of sites carrying out gender analysis}}{\text{Total \# of sites assessed}} \text{ X } 100$$

Data Source—Module IIa: RHIS Performance Diagnostic Tool (Region Level)			
Indicator	**Numerator**	**Denominator**	**%**
Up-to-date documents containing comparisons of sex-disaggregated data were shown	*	*	*

* not collected during this EN-MINI-PRISM Tools pilot assessment

Table 6B.3 Use of gender-disaggregated data for decision making and planning

C. Use of gender-disaggregated data for decision making and planning

Indicator: % of sites using gender-disaggregated data for decision making

$$\frac{\text{Total \# of sites using gender-disaggregated data for decision making}}{\text{Total \# of sites assessed}} \times 100$$

Data Source—Module IIa: RHIS Performance Diagnostic Tool (Region Level)			
Indicators	**Numerator**	**Denominator**	**%**
Reports and/or bulletins contain discussions and decisions based on key performance targets based on RHIS sex-disaggregated data	*	*	*
Discussions were held to review key performance targets based on RHIS sex disaggregated data	*	*	*
Decisions were made based on the discussion of the district and/or health facility's performance regarding reducing the gender gap in the provision of health services	*	*	*
Annual plan exists and contains activities and/or targets related to improving or addressing gender disparity in health services coverage	*	*	*

* not collected during this EN-MINI-PRISM Tools pilot assessment

Table 6B.4 Use of gender-disaggregated data to identify and address gender disparities in service delivery

Indicator: % of respondents who perceive that the organization emphasizes the need to use RHIS to identify and address gender disparities in service delivery

$$\frac{\text{Sum of respondents' score on perceived emphasis in data use to address gender inequity}}{\text{Total \# of respondents x 5}} \times 100$$

5 being the highest possible score on every answer

Data Source—Module VI: OBAT			
Indicators	**Numerator**	**Denominator**	**%**
Respondent perceives that superiors in the health department emphasize a need to use RHIS data to identify potential gender related disparities in service delivery or use	*	*	*
Respondent perceives that staff in the health department use sex disaggregated or gender sensitive RHIS data to identify and/or solve gender related problems in service delivery	*	*	*

* not collected during this EN-MINI-PRISM Tools pilot assessment

Table 6B.5 Knowledge of the rationale for disaggregating data by gender

D. Knowledge

Indicator: Health workers' knowledge of the rationale for disaggregating data by gender

Indicator: % of respondents able to show age- and sex-disaggregation for an indicator

$$\frac{\text{Total \# of respondents able to show age- and sex- disaggregation for an indicator}}{\text{Total \# of respondents x (1 or 3)}} \times 100$$

Data Source: Module III. eRHIS Assessment Tool			
Indicator	**Numerator**	**Denominator**	**%**
Respondent can show age and sex disaggregation for the selected indicator	*	*	*

* not collected during this EN-MINI-PRISM Tools pilot assessment

Table 6B.6 Percentage of respondents describe importance of age and sex disaggregation for an indicator

Data Source—Module VI: OBAT			
Indicators	**Numerator**	**Denominator**	**%**
Describes information acquired t by disaggregating the data by sex and how it helps in planning/improving service delivery	*	*	*
Describe at least three reasons for collecting, or uses of, data on a monthly basis on sex of patients	*	*	*

* not collected during this EN-MINI-PRISM Tools pilot assessment

6C. Gender Factors—District Level

Section 6C. Tables: Gender Factors—District Level

Gender Indicators: District Level

Table 6C.1 System capturing gender-disaggregated data

A. System capturing gender-disaggregated data

Indicator: eRHIS capturing data disaggregated by sex

Data Source—Module III: eRHIS Assessment Tool			
Indicator	**Numerator**	**Denominator**	**%**
RHIS software captures data disaggregated by sex	*	*	*

*** not collected during this EN-MINI-PRISM Tools pilot assessment**

Table 6C.2 System capturing gender-disaggregated data

B. Analysis of data by gender

Indicator: % of sites carrying out gender analysis

$$\frac{\text{Total \# of sites carrying out gender analysis}}{\text{Total \# of sites assessed}} \times 100$$

Data Source—Module IIa: RHIS Performance Diagnostic Tool (District Level)			
Indicator	**Numerator**	**Denominator**	**%**
Up-to-date documents containing comparisons of sex-disaggregated data were shown	5	6	83%

Table 6C.3 Use of gender-disaggregated data for decision making and planning

C. Use of gender-disaggregated data for decision making and planning

Indicator: % of sites using gender-disaggregated data for decision making

$$\frac{\text{Total \# of sites using gender disaggregated data for decision-making}}{\text{Total \# of sites assessed}} \times 100$$

Data Source—Module IIa: RHIS Performance Diagnostic Tool (District Level)			
Indicators	**Numerator**	**Denominator**	**%**
Reports and/or bulletins contain discussions and decisions based on key performance targets based on RHIS sex-disaggregated data	6	6	100%
Discussions were held to review key performance targets based on RHIS sex disaggregated data	2	6	33%
Decisions were made based on the discussion of the district and/or health facility's performance regarding reducing the gender gap in the provision of health services	1	6	17%
Annual plan exists and contains activities and/or targets related to improving or addressing gender disparity in health services coverage	0	6	0%

Table 6C.4 Use of gender-disaggregated data to identify and address gender disparities in service delivery

Indicator: % of respondents that perceive that the organization emphasizes the need to use RHIS to identify and address gender disparities in service delivery

$$\frac{\text{Sum of respondent score on perceived emphasis in data use to address gender inequity}}{\text{Total \# of respondents x 5}} \times 100$$

5 being the highest possible score on every answer

Data Source—Module VI: OBAT			
Indicators	**Numerator**	**Denominator**	**%**
Respondent perceives that superiors in the health department emphasize a need to use RHIS data to identify potential gender related disparities in service delivery or use	*	*	*
Respondent perceives that staff in the health department use sex disaggregated or gender sensitive RHIS data to identify and/or solve gender related problems in service delivery	*	*	*

* not collected during this EN-MINI-PRISM Tools pilot assessment

Table 6C.5 Indicator: Health workers' knowledge of the rationale for disaggregating data by gender

D. Knowledge

Indicator: Health workers' knowledge of the rationale for disaggregating data by gender

$$\frac{\text{Total \# of respondents able to show age and sex disaggregation for an indicator}}{\text{Total \# of districts or facilities assessed}} \times 100$$

Data Source: Module III. eRHIS Assessment Tool			
Indicator	**Numerator**	**Denominator**	**%**
Respondent can show age and sex disaggregation for the selected indicator	*	*	*

* not collected during this EN-MINI-PRISM Tools pilot assessment

Table 6C.6 Percentage of respondents describe importance of age and sex disaggregation for an indicator

Data Source—Module VI: OBAT			
Indicators	**Numerator**	**Denominator**	**%**
Describes information acquired by disaggregating the data by sex and how it helps in planning/improving service delivery	*	*	*
Describe at least three reasons for collecting, or uses of, data on a monthly basis on sex of patients	*	*	*

* not collected during this EN-MINI-PRISM Tools pilot assessment

6D. Gender Factors—Facility Level

Section 6D. Tables: Gender Factors—Facility Level

Gender Indicators: Facility Level

Table 6D.1 Analysis of data by gender

B. Analysis of data by gender

Indicator: % of sites carrying out gender analysis

$$\frac{\text{Total \# of sites carrying out gender analysis}}{\text{Total \# of sites assessed}} \times 100$$

Data Source—Module IIb: RHIS Performance Diagnostic Tool (HF Level)			
Indicator	**Numerator**	**Denominator**	**%**
Up-to-date documents containing comparisons of sex-disaggregated data were shown	8	21	38%

Table 6D.2 Use of gender-disaggregated data for decision making and planning

C. Use of gender-disaggregated data for decision making and planning

Indicator: % of sites using gender disaggregated data for decision making

$$\frac{\text{Total \# of sites using gender disaggregated data for decision making}}{\text{Total \# of sites assessed}} \times 100$$

Data Source—Module IIb: RHIS Performance Diagnostic Tool (HF Level)			
Indicators	**Numerator**	**Denominator**	**%**
Reports and/or bulletins contain discussions and decisions based on key performance targets based on RHIS sex-disaggregated data	7	21	33%
Discussions were held to review key performance targets based on RHIS sex disaggregated data	5	21	24%
Decisions were made based on the discussion of the district and/or health facility's performance regarding reducing the gender gap in the provision of health services	3	21	14%
Annual plan exists and contains activities and/or targets related to improving or addressing gender disparity in health services coverage	1	21	5%

Table 6D.3 Use of gender-disaggregated data for decision making and planning

Indicator: % of respondents who perceive that the organization emphasizes the need to use RHIS to identify and address gender disparities in service delivery

$$\frac{\text{Sum of respondent score on perceived emphasis in data use to address gender inequity}}{\text{Total \# of respondents x 5}} \times 100$$

Data Source—Module VI: OBAT			
Indicators	**Numerator**	**Denominator**	**%**
Respondent perceives that superiors in the health department emphasize a need to use RHIS data to identify potential gender related disparities in service delivery or use	216	260	83%
Respondent perceives that staff in the health department use sex disaggregated or gender sensitive RHIS data to identify and/or solve gender related problems in service delivery	218	260	84%

Table 6D.4 Health workers knowledge of the rationale for disaggregating data by gender

D. Knowledge

Indicator: Health workers knowledge of the rationale for disaggregating data by gender

$$\frac{\text{Total \# of respondents able to show age and sex disaggregation for an indicator}}{\text{Total \# of districts or facilities assessed}} \times 100$$

Data Source: Module III. eRHIS Assessment Tool			
Indicator	**Numerator**	**Denominator**	**%**
Respondent can show age and sex disaggregation for the selected indicator	5	6	83%

Table 6D.5 Percentage of respondents describe importance of age and sex disaggregation for an indicator

Data Source—Module VI: OBAT			
Indicators	**Numerator**	**Denominator**	**%**
Describes information acquired by disaggregating the data by sex and how it helps in planning/improving service delivery	8	156	5%
Describe at least three reasons for collecting, or uses of, data on a monthly basis on sex of patients	94	156	60%

6E. Summary Table for Gender Indicators

			Central			Regional			District			Facility		
Domain	**Indicator**		**Numerator**	**Denominator**	**%**	**Numerator**	**Denominator**	**%**	**Numerator**	**Denominator**	**%**	**Numerator**	**Denominator**	**%**
System capturing gender disaggregated data	eRHIS capturing data disaggregated by sex		2	2	100%	*	*	*	*	*	*			
Analysis of data by gender	% of sites carrying out gender analysis	Up-to-date documents containing comparisons of sex-disaggregated data were shown	*	*	*	*	*	*	5	6	83%	8	21	38%
Use of gender disaggregated data for decision making and planning	% of sites using gender disaggregated data for decision making	Reports and/or bulletins contain discussions and decisions based on key performance targets based on RHIS sex-disaggregated data	*	*	*	*	*	*	6	6	100%	7	21	33%
		Discussions were held to review key performance targets based on RHIS sex disaggregated data	*	*	*	*	*	*	2	6	33%	5	21	24%

			Central			Regional			District			Facility		
Domain	**Indicator**		**Numerator**	**Denominator**	**%**	**Numerator**	**Denominator**	**%**	**Numerator**	**Denominator**	**%**	**Numerator**	**Denominator**	**%**
		Decisions were made based on the discussion of the district and/or health facility's performance regarding reducing the gender gap in the provision of health services	*	*	*	*	*	*	1	6	17%	3	21	14%
		Annual plan exists and contains activities and/or targets related to improving or addressing gender disparity in health services coverage	*	*	*	*	*	*	0	6	0%	1	21	5%

Domain	Indicator		Central			Regional			District			Facility		
			Numerator	Denominator	%	Numerator	Denominator	%	Numerator	Denominator	%	Numerator	Denominator	%
	% of respondents who perceive that the organization emphasizes the need to use RHIS to identify and address gender disparities in service delivery	Respondent perceives that superiors in the health department emphasize the need to use RHIS data to identify potential gender-related disparities in service delivery or use	*	*	*	*	*	*	*	*	*	216	260	83%
		Respondent perceives that staff in the health department use sex-disaggregated or gender-sensitive RHIS data to identify and/or solve gender-related problems in service delivery	*	*	*	*	*	*	*	*	*	218	260	84%
	% of respondents able to show age and sex disaggregation for an indicator	Respondent can show age and sex disaggregation for the selected indicator	*	*	*	*	*	*	*	*	*	5	6	83%

			Central			Regional			District			Facility		
Domain	**Indicator**		**Numerator**	**Denominator**	**%**	**Numerator**	**Denominator**	**%**	**Numerator**	**Denominator**	**%**	**Numerator**	**Denominator**	**%**
		Describes information acquired by disaggregating the data by sex and how it helps in planning/improving service delivery	*	*	*	*	*	*	*	*	*	8	156	5%
		Describe at least three reasons for collecting, or uses of, data on a monthly basis on sex of patients	*	*	*	*	*	*	*	*	*	94	156	60%

Appendix 2 Overview: The EN-MINI-PRISM Tools

RHIS Overview EN-MINI-PRISM Tool 1

This tool examines technical determinants including the structure and design of existing information systems for newborns, information flows, and interaction of different information systems. It looks at the extent of RHIS fragmentation and redundancy and helps to initiate discussion of data integration and use.

RHIS Performance Diagnostic EN-MINI-PRISM Tool 2

This tool determines the overall level of RHIS performance: the level of data quality and use of information. This tool also captures technical and organizational determinants such as indicator definitions and reporting guidelines; the level of complexity of data collection tools and reporting forms; and the existence of data-quality assurance mechanisms, RHIS data use mechanisms, and supervision and feedback mechanisms.

Electronic RHIS Functionality and Usability Assessment EN-MINI-PRISM Tool 3

This tool examines the functionality and user-friendliness of the technology employed for generating, processing, analyzing, and using routine health data.

Management Assessment EN-MINI-PRISM Tool 4

The Management Assessment Tool (MAT) takes rapid stock of RHIS management practices and supports the development of action plans for better management.

Facility/Office Checklist EN-MINI-PRISM Tool 5

This checklist assesses the availability and status of resources needed for RHIS implementation at supervisory levels.

Organizational and Behavioral Assessment Tool EN-MINI-PRISM Tool 6

The Organizational and Behavioral Assessment Tool (OBAT) questionnaire identifies behavioral and organizational determinants such as motivation, RHIS self-efficacy, task competence, problem-solving skills, and the organizational environment promoting a culture of information.

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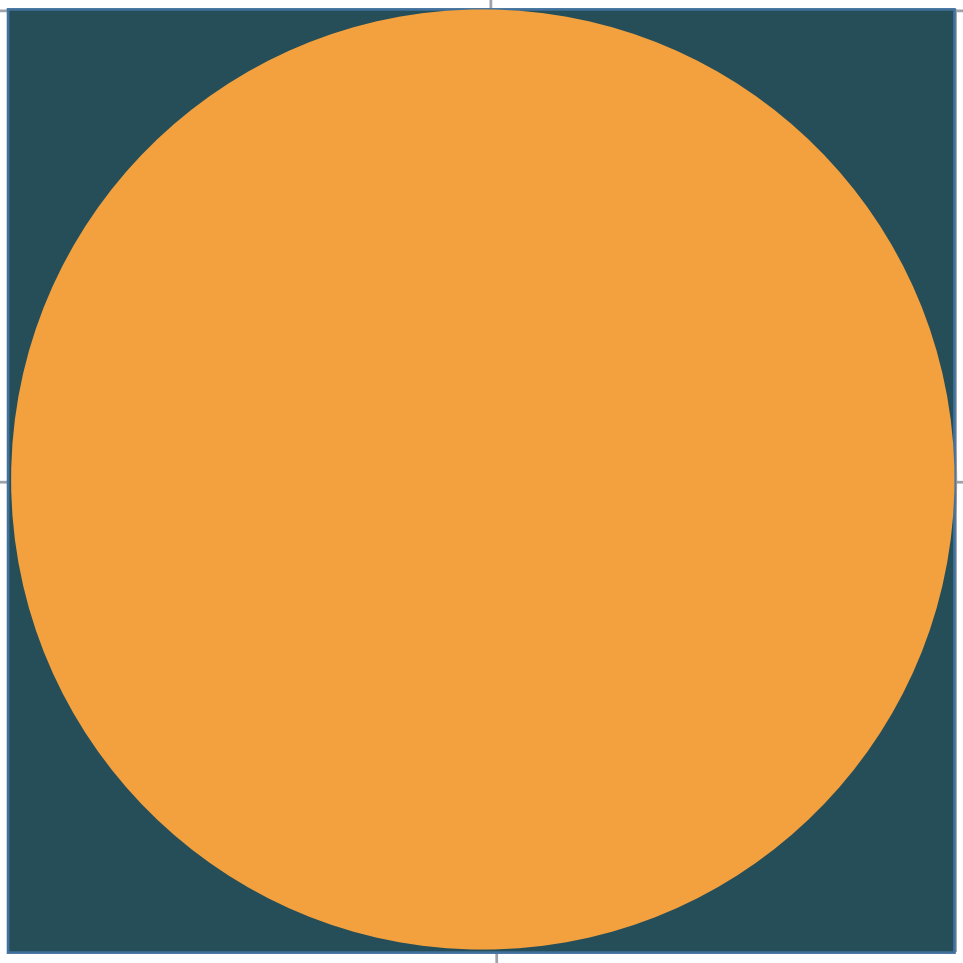

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