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

Scoring Guide for
EN-MINI-PRISM Tool 6

Organizational/ Behavioral Assessment EN-MINI-PRISM Tool 6

This scoring guide provides guidance for standardized marking of:

Part 1 section 1.3, 1.4

Part 2 section 2.3

Part 3 section 3.1

EN-MINI tools

May 2022 Version 1.2

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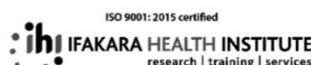Part 1 section 1.3, 1.4

Part 2 section 2.3

Part 3 section 3.1

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Acknowledgments

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

Contents

Abbreviations

DHIS 2   District Health Information Software version 2

DQR   Data Quality Review [Tool]

eRHIS   electronic routine health information system

HMIS   health management information system

IDSR   integrated disease surveillance and response (notifiable diseases)

LQAS   lot quality assurance sampling

MAT   Management Assessment Tool

MCH   maternal and child health

MFL   master facility list

MOH   Ministry of Health

OBAT   Organizational and Behavioral Assessment Tool

OPD   outpatient department

PRISM   Performance of Routine Information System Management

RDQA   routine data quality assessment

RHIS   routine health information system

SBA   skilled birth attendance

SOP   standard operating procedure

USAID   United States Agency for International Development

Overview of the EN-MINI-PRISM Tool 6 Scoring Guide

Purpose of this scoring guide

This guide accompanies Organizational and Behavioral Assessment EN-MINI-PRISM Tool 6. Please see full EN-MINI-PRISM tool version for further details.

Data Requirements, Collection, and Management and Analysis

Data Entry Platform

EN-MINI-PRISM Tool 6 data are collected using pen and paper. The EN-MINI-PRISM tools have been set up for digital data collection using SurveyCTO and a standardized automated analysis. Please see the full EN-MINI-PRISM tool version for further details.

Some responses to the EN-MINI-PRISM Tool 6 questions need to be entered from the paper response sheet directly onto the EN-MINI-PRISM Tool 6 SurveyCTO form. Other responses require scoring by the data collection team using this guide. The score is then entered into the EN-MINI-PRISM Tool 6 SurveyCTO form. This is detailed in the table below:

EN-MINI-PRISM Tool 6 Section	Data Collection Method	Is scoring needed?	What to enter in the EN-MINI-PRISM Tool 6 SurveyCTO form
Part 1, Section 1.1 Respondent Background	Pen & paper	No	Enter response
Part 1, Section 1.2 Promotion of information culture	Pen & paper	No	Enter response
Part 1, Section 1.3 RHIS knowledge	Pen & paper	Score using this guide	Enter score
Part 1, Section 1.4 Case study on data quality	Pen & paper	Score using this guide	Enter score
Part 1, Section 1.5 Self-perception of competency to perform RHIS tasks	Pen & paper	No	Enter response
Part 2, Section 2.1 Competency to perform RHIS tasks	Pen & paper	Score using this guide	Enter score
Part 3, Section 3.1	Pen & paper	Score using this guide	Enter score
Part 4, Section 4.1	Pen & paper	Score using this guide	Enter score
Part 5, Section 5.1	Pen & paper	Score using this guide	Enter score

In this guide, each question to be scored is shown in italics with its scoring algorithm directly below.

Scoring Guide for Organizational and Behavioral Assessment EN-MINI-PRISM Tool 6

Part 1. For Staff and Management at All Levels: Questions with scoring guide

Scoring guide for section 1.3

Section 1.3: RHIS Knowledge			
[SurveyCTO] **Enter the scores for the following questions that were completed and scored on paper based on below answer guide**			
Describe at least three reasons for collecting or using the following types of data a monthly basis:			
U1A	*Newborn Diseases/ conditions/diagnoses*		
	1.		
	2.		
	3.		
Answer key U1A		Points	Scoring U1A
To know changes in the magnitude/burden of selected diseases.		1 point	• Each correct answer gets one point with a maximum score of 3 points (if a respondent gives any 3 of these 4 response options, he or she is awarded the maximum score of 3). • Wrong answers (or no answers) get a score of zero. • The range will vary between 0 and 3.
To take action for providing/replenishing medicines and other supplies (reduce stockouts of essential supplies)/ resource allocation.		1 point	
To plan preventive and promotive activities.		1 point	
To identify disease outbreaks and take action to address epidemics.		1 point	

U1B	*Newborn Immunization*		
	1.		
	2.		
	3.		
Answer key U1B		Points	Scoring U1B
To know the coverage of effective interventions (immunization) for improving maternal or child health; to understand whether the eligible population is getting the appropriate vaccination.		1 point	• Each correct answer gets one point with a maximum score of 3 points (if a respondent gives any 3 of these 4 response options, he or she is awarded the maximum score of 3). • Wrong answers (or no answers) get a score of zero. • The range will vary between 0 and 3.
To monitor the performance of the health system or the program. To track changes in program performance over time (to understand how well a program is performing with respect to meeting local, national, and global standards).		1 point	

To determine whether immunization-related activities need adjustment during the intervention to improve desired outcomes; to plan for immunization activities, such as developing targets for immunization.	1 point	
To take action for providing necessary resources (e.g., staffing, equipment, vaccines).	1 point	

U1C	*Maternal Age*		
	1.		
	2.		
	3.		
Answer key U1C		**Points**	**Scoring U1C**
To gauge needs: to know which age group is affected by certain diseases or health problems.		1 point	• Each correct answer gets one point with a maximum score of 3 points (if a respondent gives any 3 of these 4 response options, he or she is awarded the maximum score of 3).
To know whether the appropriate age group is getting the relevant services.		1 point	
For planning purposes: to prioritize and develop interventions/responses for the relevant age group, e.g., to reach targeted age groups with relevant health messages.		1 point	• Wrong answers (or no answers) get a score of zero. • The range will vary between 0 and 3.
To ensure equitable service coverage across people of all age groups.		1 point	

U1D	*Sex of newborn*		
	1.		
	2.		
	3.		
Answer key U1D		**Points**	**Scoring U1D**
To know which group is affected by a specific disease.		1 point	• Each correct answer gets one point with a maximum score of 3 points (if a respondent gives any 3 of these 4 response options, he or she is awarded the maximum score of 3).
To ensure equitable service coverage across sexes.		1 point	
To provide a standard package of services to various groups of the population; to focus activities on those people who need them most.		1 point	• Wrong answers (or no answers) get a score of zero. • The range will vary between 0 and 3.
For planning and resource allocation purposes: to prioritize and develop interventions/responses for relevant groups.		1 point	

U1E	*Geographical data or residence of families*
	1.
	2.
	3.

Answer key U1E	Points	Scoring U1E
To follow up clients, as needed (to ensure continuity of care), e.g., to conduct household visits.	1 point	• Each correct answer gets one point with a maximum score of 3 points (if a respondent gives any 3 of these 4 response options, he or she is awarded the maximum score of 3). • Wrong answers (or no answers) get a score of zero. • The range will vary between 0 and 3.
For disease surveillance (to control epidemics/disease outbreaks).	1 point	
To plan preventive and promotive activities targeted to certain geographic areas.	1 point	
To improve access to and use of health services.	1 point	

U1F	*Why are population data needed (e.g., information on the number of people living in the catchment area, disaggregated by relevant characteristics, such as age and sex)?*
	1.
	2.
	3.

Answer key U1F	Points	Scoring U1F
To use as the denominator for calculating the various indicators (coverage, detection, and treatment of health problems).	1 point	• Each correct answer gets one point with a maximum score of 3 points. • Wrong answers (or no answers) get a score of zero. • The range will vary between 0 and 3.
To plan the delivery of various health services.	1 point	
To calculate the workload of health staff.	1 point	

U2	*Describe at least three aspects of data quality:*
	1.
	2.
	3.

Answer key U2	Points	Scoring U2
Data accuracy or precision	1 point	• Each correct answer gets one point with a maximum score of 3 points (if a respondent gives any 3 of these 5 response options, he or she is awarded the maximum score of 3). • Wrong answers (or no answers) get a score of zero. • The range will vary between 0 and 3.
Report timeliness	1 point	
Report/data completeness	1 point	
Reliability	1 point	
Consistency	1 point	

U3	*Describe at least three ways of ensuring data quality, as relevant to your job classification/responsibilities:*
	1.
	2.

	3.		
Answer key U3		**Points**	**Scoring U3**
Observation of the service provider for correct diagnosis and documentation		1 point	• Each correct answer gets one point with a maximum score of 3 points (if a respondent gives any 3 of these 7 response options, he or she is awarded the maximum score of 3). • Wrong answers (or no answers) get a score of zero. • The range will vary between 0 and 3.
Cross check recorded data against reported data (recount data from the source document and compare them with the reported data)		1 point	
Review records or reports and identify data entry problems or errors		1 point	
Use built-in electronic data validation rules to review data quality		1 point	
Internal consistency: e.g., comparison of the number of patients and the amount of drugs dispensed		1 point	
External consistency: comparison of the indicator calculated from routine data with the same indicator calculated using data from other sources		1 point	
Historical comparison		1 point	

Scoring guide for section 1.4

<table>
<tr><td colspan="3" style="background-color:#e0561a">Section 1.4: Case study on data quality</td></tr>
<tr><td colspan="3">[SurveyCTO]

ENTER THE SCORES FOR THE FOLLOWING QUESTIONS THAT WERE COMPLETED ON PAPER</td></tr>
<tr><td colspan="3">Newborn adapted case study:

Dr. Akram, District Health Executive Officer, read a recent report prepared by the HIS Officer after a supervision visit made to five out of eight health facilities in the district. The supervisor cross-checked the reported data with the recorded data from the source document. The supervision report showed that the average data accuracy for the indicator—neonatal mortality rate—was only 40% and Dr. Akram felt very disturbed by it. "I need to take action," he said aloud. He set up a meeting with the entire district health team to identify the reasons for the discrepancy and think about next steps to improve data quality. After some discussion with his team about the potential reasons for the low percentage of data accuracy, the district team started preparing an action plan for all health facilities in the district.</td></tr>
<tr><td>PSa</td><td colspan="2">Describe how Dr. Akram and his team defined the data quality problem in this scenario:

_____</td></tr>
</table>

Answer key PSa	Points	Scoring PSa
The average data accuracy for the neonatal mortality indicator is 40%, which is very low (likely below an established target) and is the sign data quality issues	1 point	• Each correct answer gets one point with a maximum score of 2 points (one for each criterion).
Respondent defines the data quality problem as a performance gap and decides to take action	1 point	• If incorrect, the score is zero. • The range will vary between 0 and 2.

PSb	List potential reasons for the data quality problem encountered:
	1.
	2.
	3.
	4.

Answer key PSb	Points	Scoring PSb
Gaps in the understanding of data definitions and/or data collection methods	1 point	• Each correct answer gets one point with a maximum score of 3 points (if a respondent gives any 3 of these 4 response options, he or she is awarded the maximum score of 3).
Data recording and data entry errors (e.g., typing error, data entered in the wrong box, calculation error)	1 point	
Systemic errors: logical errors embedded in the system that cause these errors to remain unnoticed unless underlying systemic issues are corrected (e.g., errors due to multiple registers or poorly designed registers, lack of written guidelines)	1 point	• Wrong answers (or no answers) get a score of zero. • The range will vary between 0 and 3.
Misreporting	1 point	

PSc	Describe what major activities/actions Dr. Akram and his team may have included in the district action plan to improve data quality:
	1.
	2.
	3.
	4.
	5.

Answer key PSc	Points	Scoring PSc
Institutionalize data quality control mechanisms: once data entry is complete and a report is ready, it should be checked for missing values, calculation mistakes, abnormal figures, etc.	1 point	
Built-in data quality validation rule to facilitate a routine data quality check	1 point	
Monthly data reviews and feedback	1 point	• Each correct answer gets one point with a maximum score of 5 points (if a respondent gives any 5 of these 7 response options, he or she is awarded the maximum score of 5).
Make written RHIS guidelines and procedures available at all levels	1 point	
Streamline data recording and reporting systems: reduce multiple recording and reporting forms for the same indicator (limiting the risk for double-counting, for example)	1 point	• Wrong answers (or no answers) get a score of zero.
Training for staff on data recording and reporting; also make sure that staff understand the definition of the data element being collected	1 point	• The range will vary between 0 and 5.
Training for staff on the public health importance of the reported data	1 point	

Part 2. For Staff and Management at District and Higher Levels: Questions with scoring guide

Scoring guide for section 2.1

Section 2.1: Competency to perform RHIS tasks

[SurveyCTO]

ENTER THE SCORES FOR THE FOLLOWING QUESTIONS THAT WERE COMPLETED ON PAPER

CD1	*The estimated number of pregnant women in the district catchment area for the current period is 760. The health facilities in your district have registered 456 pregnant mothers for antenatal care—first visit (ANC1). Calculate the percentage of pregnant mothers in the district attending ANC in the current period.* _____

Answer key CD1	Scoring CD1
100 x (456/760) = 60% of pregnant mothers in the district are attending ANC in the current period	• A correct answer gets one point. • Wrong answers (or no answers) get a score of zero.

CD2_n	***Newborn adapted case study:*** *The table below shows the monthly birthweight results for Coast District. In this district, government facilities provide maternal and newborn health services. During a recent review of the data, it was discovered that a significant number of adolescents were having low birthweight babies. In response to these data, clinics in Coast District regularly review birthweight data to inform decisions related to increasing the uptake of maternal and newborn services.*

Table 1. Birthweight monthly summary, December 2009

		Facility # 1		Facility # 2		Facility # 3		Facility # 4	
		Age of client (in years)							
Birthweight Indicators		<20	20+	<20	20+	<20	20+	<20	20+
HCT 1	Number of facility births	341	401	61	226	501	623	108	151
HCT 2	Number of newborns weighed	339	399	53	220	494	600	108	151
HCT 4	Number of newborns with recorded birthweight	338	399	40	214	431	487	107	151
HCT 5	Number of low birthweight newborns	30	41	9	63	96	141	17	19
HCT 7	Number of clients referred for follow up	30	41	4	41	84	98	4	8

CD2a_n	*Develop a bar chart depicting the distribution across the maternal ages, of newborns with a low birthweight at the four facilities in Coast District.*

Scoring CS2n

Correct presentation of the bar graph to look like the graph below.

Alternatively, all <20 year olds and >20 year olds could be grouped together.

Incorrect answers (or no answers) get a score of zero.

Number of low birthweight newborns

Age of mother in years by Coast District facility
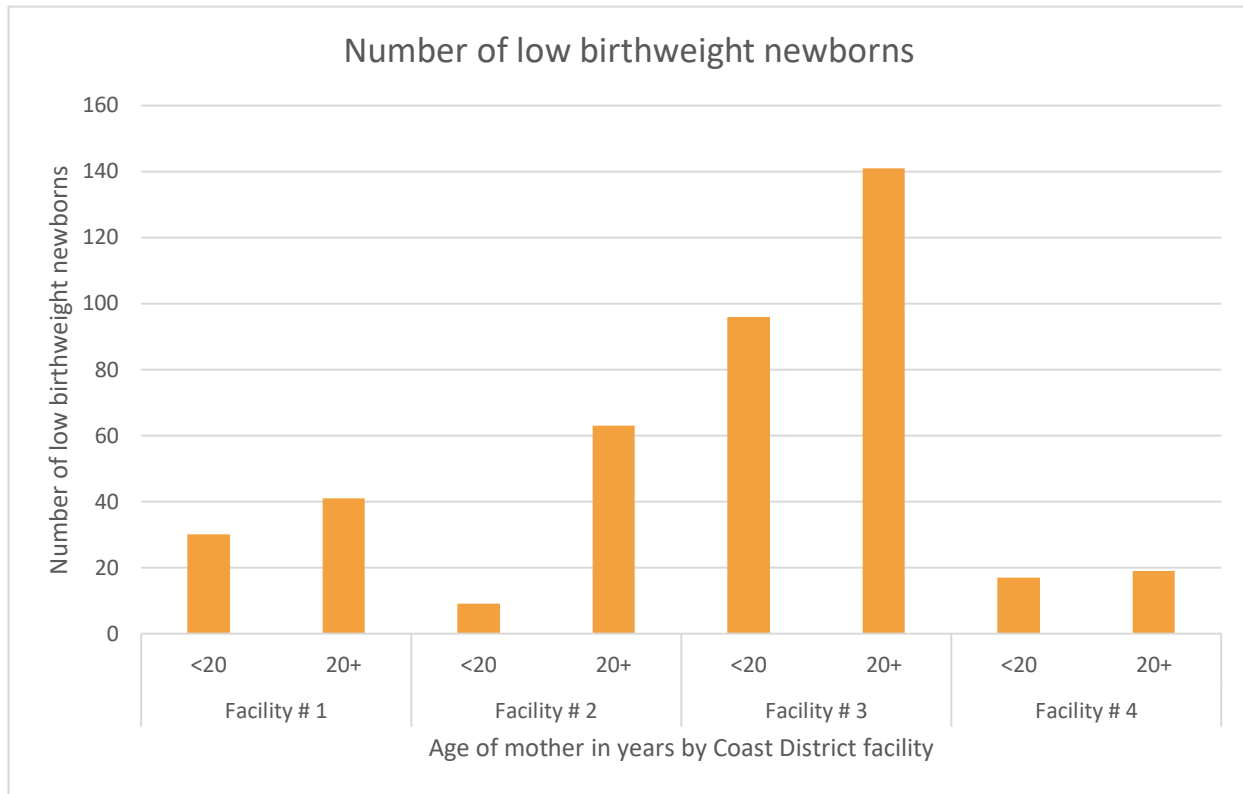
| CD2b_n | **Newborn adapted case study:**

Figure 1. Facility based early initiation of breastfeeding in the period of January to December 2021 by a local government agency, as compared to the national target |

	Interpret the graph above:
	_____

Answer key CD2b_n	Points	Scoring CD2b
Abaji, Kuje, and Municipal Districts have attained the target coverage rate (80%) by the end of 2021.	1 point	• Each correct answer gets one point with a maximum score of two points (if a respondent gives any 2 of these 3 response options, he or she is awarded the maximum score of 2).
Bwari, Kwali, Bwondo, and Gwagwalada Districts did not meet the target breastfeeding initiation coverage rate in 2021.	1 point	
The Abaji District surpassed the target breastfeeding initiation coverage rate by at least 10%.	1 point	• Wrong answers (or no answers) get a score of zero. • The range will vary between 0 and 2.

CD2c_n	*The proportion of infants exclusively breastfeeding at 6 months is estimated at 5 percent. The government's National Childhood Nutrition Plan (2015-2020) set revised targets to improve breastfeeding coverage. To meet this goal, the National Childhood Nutrition Program began focusing on early initiation of breastfeeding. The target was set at 80% for the end of 2020.*
CD2c1_n	*Among the districts shown in the above graph, which attained the target coverage rate (80%) by the end of 2020?* _____
D2c2_n	*What guidance could you provide to districts and programs based on these data?* _____

Answer key CD2c1 and CD2c2	Points	Scoring CD2c1 and CD2c2
Abaji, Kuje, and Municipal Districts have attained the target coverage rate (80%) by the end of 2020.	1 point	• Each correct answer gets one point with a maximum score of 2 points.
Bwari, Kwali, Bwondo, and Gwagwalada Districts have to develop strategies to improve breastfeeding coverage	1 point	• Wrong answers (or no answers) get a score of zero. • The range will vary between 0 and 2.

CD2d_n	**Provide at least one use of the above chart** (CD2b_n) **findings at the:**
CD2d1_n	*Facility level*
	1.
	2.
	3.

Answer key CD2d1	Points	Scoring CD2d1
This chart can help the facility manager compare the performance of his/her facility with the district performance, and to adjust activities/plan.	1 point	Scoring for **CD2d1**: • Any 1 of these 2 correct answer options gets 1 point.
To raise awareness about the need for breastfeeding.	1 point	• Wrong answers (or no answers) get a score of zero. • The range will vary between 0 and 1.

CD2d2_n	Community level
	1.
	2.
	3.

Answer key CD2d2	Points	Scoring CD2d2
To raise awareness about the need for and proper use of breastfeeding.	1 point	• Any 1 of these 2 correct answer options gets 1 point.
To mobilize community members as agents for passing messages and talking to their community to encourage them to use breastfeeding.	1 point	• Wrong answers (or no answers) get a score of zero. • The range will vary between 0 and 1.

CD2d3_n	District level
	1.
	2.
	3.

Answer key CD2d3	Points	Scoring CD2d3
To assess progress toward goals	1 point	
To identify gaps in breastfeeding coverage	1 point	• Any 1 of these 4 correct answer options gets 1 point.
To mobilize resources for breastfeeding; to advocate with partners for increased support	1 point	• Wrong answers (or no answers) get a score of zero.
To advocate for changes to policies (such as the transition from targeting vulnerable populations to achieving universal coverage)	1 point	• The range will vary between 0 and 1.

CD3_n	**Newborn adapted case study:** *A survey in the facility catchment area found 80 newborns had died in the first 28 days of life. The total number of live births was 2,000. What is the neonatal mortality rate?* _____

Answer key CD3	Scoring CD3
1,000x (80/2,000) = 40 per 1,000 live births	• A correct answer gets one point. • Wrong answers (or no answers) get a score of zero. • The range will vary between 0 and 1.

CD4_n	**Newborn adapted question:** *If the neonatal mortality rate was 2 percent and the total number of live births was 10,000, calculate the number of newborns who died.* _____

Answer key CD4	Scoring CD4
0.02 x 10,000 = 200 newborns who died	• A correct answer gets one point. • Wrong answers (or no answers) get a score of zero. • The range will vary between 0 and 1.

Part 3. For Health Facility In-Charge: Questions with scoring guide

Scoring guide for section 3.1

Section 3.1: Competency to perform RHIS tasks	
[SurveyCTO] ***ENTER THE SCORES FOR THE FOLLOWING QUESTIONS THAT WERE COMPLETED ON PAPER***	
CF1_n	*The estimated number of stable newborns with birthweight ≤2000g in the catchment area for the current period is 120. The kangaroo mother care (KMC) ward in your facility has 40 admitted mother baby pairs. Calculate the percentage of eligible newborns in the facility catchment area receiving KMC.* _____

Answer key CF1	Scoring CF1
100 x (40/120) = 33.3% of eligible newborns in the facility catchment area are receiving KMC	• A correct answer gets one point. • Wrong answers (or no answers) get a score of zero. • The range will vary between 0 and 1.

CF2_n	**_Newborn adapted case study:_**
	The table below shows the number of stable newborns with birthweight <2000g born in Bwari Health Centre during 2021, as well as the number of mother baby pairs receiving KMC.

Table 1. Stable newborns with birthweight <2000g at Bwari Health Centre and who received KMC

Indicator	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
# Stable newborns <2000g	156	162	158	151	168	148	129	138	145	171	164	152
# Mother-baby pairs who received KMC	60	72	78	70	74	70	62	72	78	77	68	71

CF2a_n	Develop a line graph depicting the trend over one year of KMC coverage among eligible babies born at Bwari Health Center.

Scoring CF2a

Correct presentation of the line graph gets one point. Incorrect answers (or no answers) get a score of zero.

KMC Coverage at Bwari Hospital
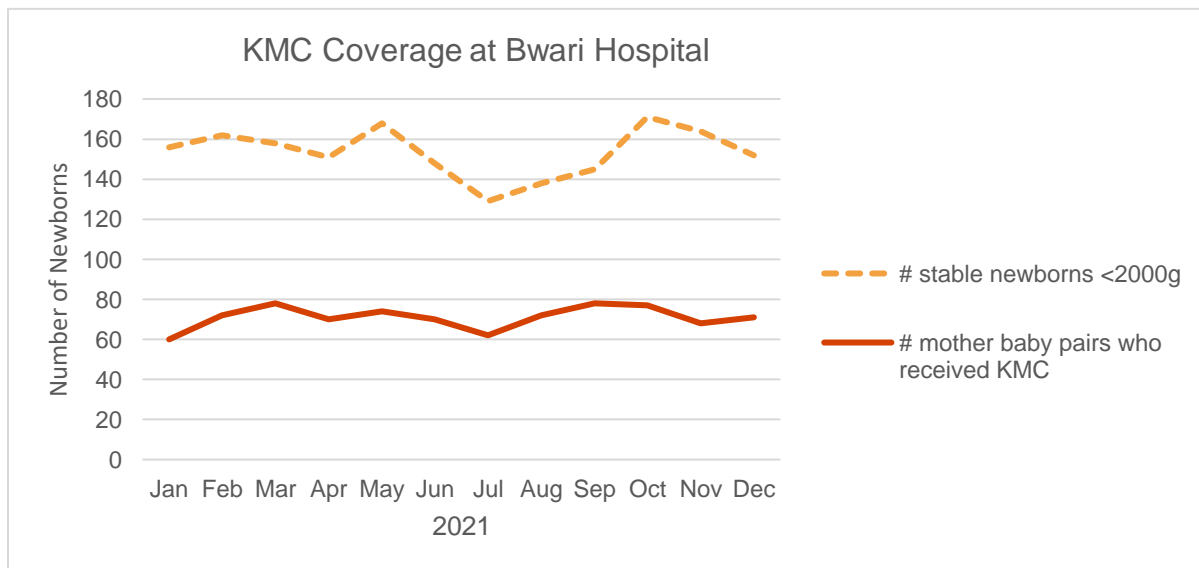
CF2b_n	*Newborn adapted case study:*
	Kateria City Hospital, January–March, 2021 *Figure: Neonatal mortality rates per 1,000 livebirths, by birthweight categories, Kateria City Hospital, January–March, 2021*
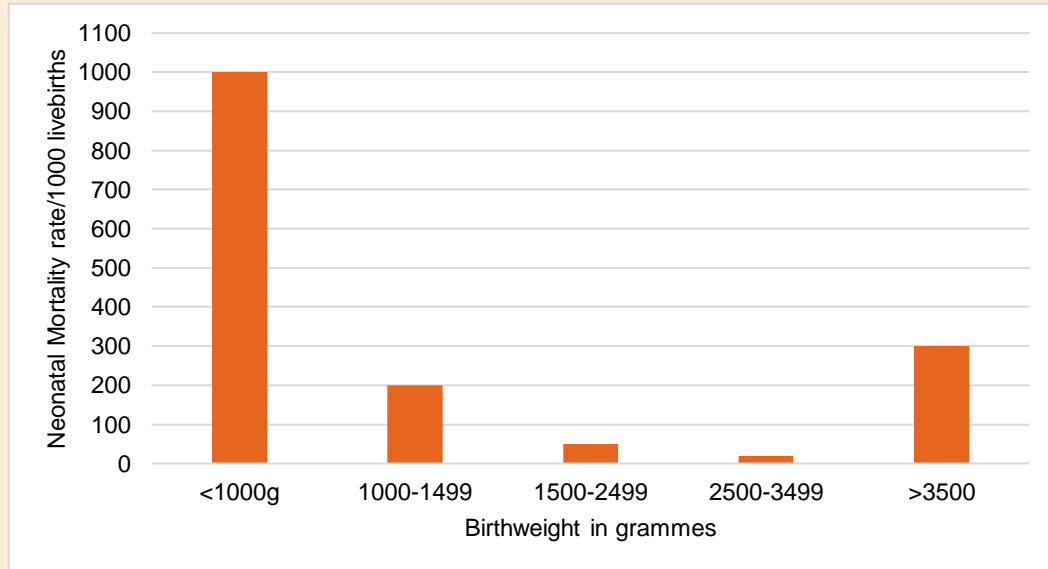
Table: Number of neonatal livebirths and neonatal deaths by birthweight categories, Kateria City Hospital, January–March 2021

Birthweight	Live births	Deaths
<1000g	1	1
1000-1499	5	1
1500-2499	140	7
2500-3499	200	4
>3500	10	3
Totals	356	16

What do the data above tell you about the birthweight mix for neonatal deaths the Kateria City hospital?

_____

Answer key CF2b	Points	Scoring CF2b
The graph shows that the neonatal mortality rate is highest for babies in birthweight categories <1000g, then >3500g, then 1000–1499g, then 1500g–2499g then 2500–3499g	1 point	• Each correct answer gets one point with a maximum score of 2 points. • Wrong answers (or no answers) get a score of zero. • The range will vary between 0 and 2.
The graph shows the neonatal mortality rate is lowest for babies weighing 2500–3499g, and then 1500–2499g.	1 point	

CF2c1_n	Calculate the neonatal mortality rate in Kateria city hospital during January to March 2021.		
Answer key		**Points**	**Scoring CF2c1**
1,000x (16/356) = 44.9 There neonatal mortality rate was 45 per 1,000 livebirths for babies of all birth weights between Jan–Mar 2021.1000x (16/356) = 44.9		1 point	• The correct answer gets one point with a maximum score of one point. • Wrong answers (or no answers) get a score of zero. • The range will vary between 0 and 1.

CF2c2_n	For Kateria City hospital to lower their neonatal mortality rate, which birthweight category should they focus on?	1. <1000g 2. 1000–1499g 3. 1500–2499g 4. 2500–3499g 5. >3500g	
Answer key CF2c2		**Points**	**Scoring CF2c2**
1500–2400g is the birthweight group with the largest number of deaths (n=7). Most of the deaths occur in the higher birth weight categories (2500–2499g n = 4 and >2500g n=3). To bring the rate down the focus needs to be on these birthweight categories rather than the <1000g category which has the highest rate but the smallest number of births and deaths.		1 point	• The correct answer gets one point with a maximum score of one point • Wrong answers (or no answers) get a score of zero • The range will vary between 0 and 1

CF2d_n	**Provide at least <u>one</u> use of the above graph (CF2b_n) findings at the:**		
CF2d1_n	*Facility level*		
	1.		
	2.		
	3.		
Answer key CF2d1		**Points**	**Scoring CF2d1**
This graph helps the facility monitor the number of neonatal deaths by birthweight. By observing the trend, the manager should be able to plan the workforce, commodities, and the physical resources the facility needs to improve care for newborns.		1 point	
The graph shows the importance for the facility manager to plan for interventions focused on specific birthweight category babies, e.g., low birth weight, very low birth weight, high birth weight.		1 point	• Any 1 of these 2 correct answer options gets 1 point. • Wrong answers (or no answers) get a score of zero. • The range will vary between 0 and 1.

CF2d2_n	Community level
	1.
	2.
	3.

Answer key CF2d2	Points	Scoring CF2d2
The findings in the graph highlight the high prevalence of low birthweight babies in this community.	1 point	• Any 1 of these 2 correct answer options gets 1 point. • Wrong answers (or no answers) get a score of zero. • The range will vary between 0 and 1.
The graph shows the need for community mobilization to create more awareness on the benefits of ANC, and routine care for LBW babies (KMC etc.). LBW is multifactorial, so many risk factors need to be considered with the community.	1 point	

CF3_n	**Newborn adapted case study:** *A survey in the facility catchment area found 70 newborns had died in the first 28 days of life among whom 40 were female. The total number of live births in the catchment area was 1,000, and at birth 50% were female.*
CF3a_n	What is the neonatal morality rate among boys? _____

Answer key CF3a	Scoring CF3a
1,000 x [30/ (0.5 x 1,000)] = 60 per 1,000 live births The neonatal mortality rate for boys in this facility was 60 per 1,000 live births	• A correct answer gets one point. • Wrong answers (or no answers) get a score of zero. • The range will vary between 0 and 1.

CF3b_n	What is the neonatal morality rate among girls? _____

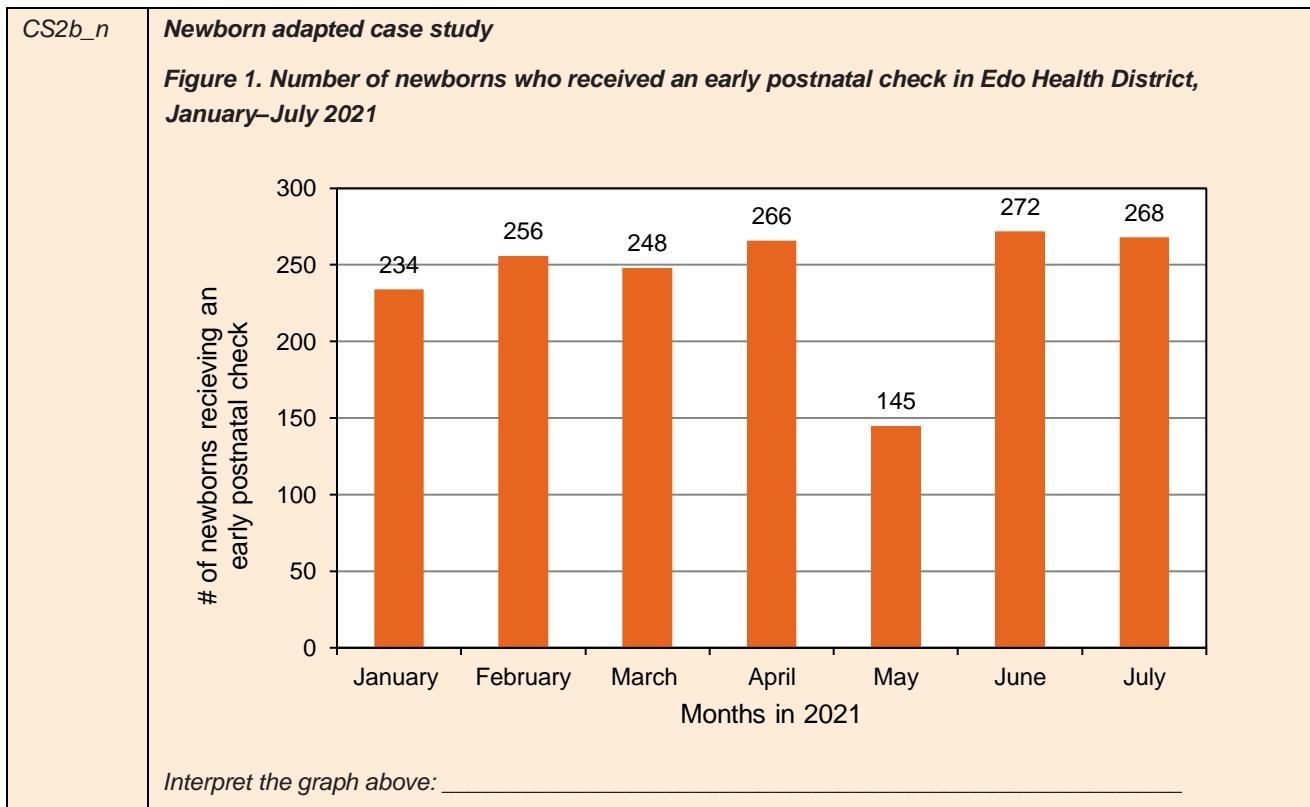| Answer key CF3b	Scoring CF3b
1,000 x [40/(0.5 x 1,000] =80 per 100 live births The neonatal mortality rate for girls in this facility was 80 per 1,000 live births	• A correct answer gets one point. • Wrong answers (or no answers) get a score of zero. • The range will vary between 0 and 1.

CF3c_n	What information do you get by disaggregating the data by sex? How does this information help you to plan and improve your service delivery? _____

Answer key CF3c	Points	Scoring CF3c
Sex-disaggregated data help to identify the most affected group among neonatal deaths	1 point	• Each correct answer gets one point with a maximum score of 2 points (if a respondent gives any 2 of these 3 response options, he or she is awarded the maximum score of 2). • Wrong answers (or no answers) get a score of zero. • The range will vary between 0 and 2.
They help the facility plan and reallocate resources to provide more targeted services to the appropriate group.	1 point	
In the example provided, both girls are more affected and further data are needed to understand if this is due to chance.	1 point	

Part 4. For Data Management Staff in the Health Facility: Questions with scoring guide

Scoring guide for section 4.1

Section 4.1: Competency to perform RHIS tasks	
[SurveyCTO] *ENTER THE SCORES FOR THE FOLLOWING QUESTIONS THAT WERE COMPLETED ON PAPER*	
CS2_n	*Newborn adapted case study:* *The coverage of kangaroo mother care was found to be 60 percent, 50 percent, 30 percent, 40 percent, and 40 percent for the years 2015, 2016, 2017, 2018, and 2019, respectively.*
CS2a_n	*Develop a trend graph (a line graph) depicting the coverage of KMC, by year*
Scoring CS2a	

Correct presentation of the line graph gets one point. Wrong answers (or no answers) get a score of zero.

An example of the graph is shown:

KMC Coverage

CS2b_n	*Newborn adapted case study*
	Figure 1. Number of newborns who received an early postnatal check in Edo Health District, January–July 2021

Interpret the graph above: _____

Answer key CS2b	Points	Scoring CS2b
Over the course of the first seven months of 2021, the number of early postnatal checks fluctuated.	1 point	• Each correct answer gets one point with a maximum score of 2 points (if a respondent gives any 2 of these 4 response options, he or she is awarded the maximum score of 2). • Wrong answers (or no answers) get a score of zero. • The range will vary between 0 and 2.
The number of early postnatal checks the health district generally followed an upward trend from January to April (with a slightly lower rate in March).	1 point	
The number of early postnatal checks showed a drastic fall in May.	1 point	
Given that there was no problem with data collection, the data showed that number of early postnatal checks have fallen in May and then plateaued in the following two months.	1 point	

CS2c_n	*What aspects of the graph stand out? Is there a trend, or an irregularity? If yes or no, explain the reasons for your answer.*

Answer key CS2c	Points	Scoring CS2c
Yes, the graph showed a slight variation over the seven months, dominated by an upward increase in the number of early postnatal checks. The drastic fall in the number of early postnatal checks in May stands out. It would be helpful to see how many early postnatal checks were provided compared with the number of live births in the catchment area.	1 point	• A correct answer gets one point. • A wrong answer (or no answer) gets a score of zero.

CS2d_n	**Provide at least one use of the above graph findings at the:**
CS2d1_n	*Facility level*
	1.
	2.
	3.

Answer key CS2d1	Points	Scoring CS2d1
To monitor facility performance as compared to its target; to determine whether service provision is on track	1 point	• Any 1 of these 3 correct answer options gets 1 point.
To monitor number of early postnatal checks and avoid stockouts of related equipment, medicines, and supplies	1 point	• Wrong answers (or no answers) get a score of zero.
To mobilize appropriate resources (vaccines, human resources, logistics, etc.)	1 point	• The range would vary between 0 and 1.

CS2d2_n	*Community level*
	1.
	2.
	3.

Answer key CS2d2	Points	Scoring CS2d2
To mobilize the community to seek early postnatal checks	1 point	• Any 1 of these 2 correct answer options gets 1 point.
To design better information, education, and communication activities	1 point	• Wrong answers (or no answers) get a score of zero.
		• The range will vary between 0 and 1.

CS3_n	*A survey in the facility catchment area found 80 newborns had died in the first 28 days of life. The total number of live births was 2,000. What is the neonatal mortality rate?*
	_____

Answer key CS3	Scoring CS3
$1{,}000 \times (80/2{,}000) = 40$ per 1,000 live births The neonatal mortality rate is 40 per 1,000 live births	• A correct answer gets one point. • Wrong answers (or no answers) get a score of zero.

CS4_n	*If the neonatal mortality rate was 2 percent and the total number of live births was 10,000, calculate the number of newborns who died.*
	_____

Answer key CS4	Scoring CS4
$0.02 \times 10{,}000 = 200$ newborns who died	• A correct answer gets one point. Wrong answers (or no answers) get a score of zero.

Part 5. For All Health Facility Staff: Questions with scoring guide

Scoring guide for section 5.1

Section 5.1: Extra data quality group case study
[SurveyCTO]
ENTER THE SCORES FOR THE FOLLOWING QUESTIONS THAT WERE COMPLETED ON PAPER
Dr. Akram, District Health Executive Officer, read a recent report prepared by the HIS Officer after a supervision visit made to five out of eight health facilities in the district. The supervisor cross-checked the reported data with the recorded data from the source document. The supervision report showed that the average data accuracy for the indicator—neonatal mortality rate—was only 40% and Dr. Akram felt very disturbed by it. "I need to take action," he said aloud. *He set up a meeting with the entire district health team to identify the reasons for the discrepancy and think about next steps to improve data quality.* *He asked each health facility to meet to discuss the potential reasons for neonatal mortality rate low data accuracy, and an action plan to improve data quality.* *Please have that discussion now as a health facility team—what would you do?*

PSb – X1	*List potential reasons for poor data quality in health facilities:*
	1.
	2.
	3.
	4.

Answer key PSb- X1	Points	Scoring PSb- X1
Gaps in the understanding of data definitions and/or data collection methods	1 point	• Each correct answer gets one point with a maximum score of 3 points (if a respondent gives any 3 of these 4 response options, he or she is awarded the maximum score of 3).
Data recording and data entry errors (e.g., typing error, data entered in the wrong box, calculation error)	1 point	
Systemic errors: logical errors embedded in the system that cause these errors to remain unnoticed unless underlying systemic issues are corrected (e.g., errors due to multiple registers or poorly designed registers, lack of written guidelines)	1 point	• Wrong answers (or no answers) get a score of zero. • The range will vary between 0 and 3.
Misreporting	1 point	

PSc – X2	*Describe what major activities/actions your team in the health facility may do to improve data quality:*
	1.
	2.
	3.
	4.
	5.

Answer key PSc-X2	Points	Scoring PSc-X2
Institutionalize data quality control mechanisms: once data entry is complete and a report is ready, it should be checked for missing values, calculation mistakes, abnormal figures, etc.	1 point	
Built-in data quality validation rule to facilitate a routine data quality check	1 point	• Each correct answer gets one point with a maximum score of 5 points (if a respondent gives any 5 of these 7 response options, he or she is awarded the maximum score of 5). • Wrong answers (or no answers) get a score of zero. • The range will vary between 0 and 5.
Monthly data reviews and feedback	1 point	
Make written RHIS guidelines and procedures available at all levels	1 point	
Streamline data recording and reporting systems: reduce multiple recording and reporting forms for the same indicator (limiting the risk for double-counting, for example)	1 point	
Training for staff on data recording and reporting; also make sure that staff understand the definition of the data element being collected	1 point	
Training for staff on the public health importance of the reported data	1 point	

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