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

# RHIS Overview EN-MINI-PRISM Tool 1



May 2022 Version 1.2













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### Data for Impact

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# Acknowledgments

The Every Newborn-Measurement Improvement for Newborn and Stillbirth Indicator (EN-MINI) tools for routine health information systems have been developed as part of the EN-BIRTH-2 study, funded by the United States Agency for International Development (USAID) through Data for Impact (D4I). USAID's Research for Decision Makers (RDM) Activity of icddr,b funded initial activities in Bangladesh. The EN-MINI-PRISM tools in this document are adapted from the Performance of Routine Information System Management (PRISM) Series, which was developed by MEASURE Evaluation.

The EN-BIRTH-2 study was conceptualized and implemented in partnership with D4I, the International Centre for Diarrheal Disease Research, Bangladesh (icddr,b), Ifakara Health Institute Tanzania, and the London School of Hygiene & Tropical Health (LSHTM), United Kingdom.

We acknowledge the collaborating teams at icddr,b and IHI for leading the pilot testing efforts and for their technical contributions. From icddr,b: Ahmed Ehsanur Rahman, Anisuddin Ahmed, Tazeen Tahsina, Shema Mhajabin, Shafiqul Ameen, Aniqa Tasnim Hossain, Tamanna Majid, Md. Taqbir Us Samad Talha, Qazi Sadeq-ur Rahman, and Shams El Arifeen. From IHI: Donat Shamba, Josephine Shabani, Getrud Joseph, Caroline Shayo, Jacqueline Minja, Irabi Kassim, Imani Irema, Nahya Salim and Honorati Masanja. From LSHTM: Louise Tina Day, Harriet Ruysen, Kim Peven, and Joy Lawn for leading the adaptation and for their technical support. From D4I: Gaby Escudero, Emily Weaver, Barbara Knittel, Dave Boone, and Kavita Singh for their technical support.

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Most importantly, we recognize the health workers, managers, leaders, data managers, policy makers, and all those who participated in the pilot testing. We are grateful to them for sharing their time and perspectives.

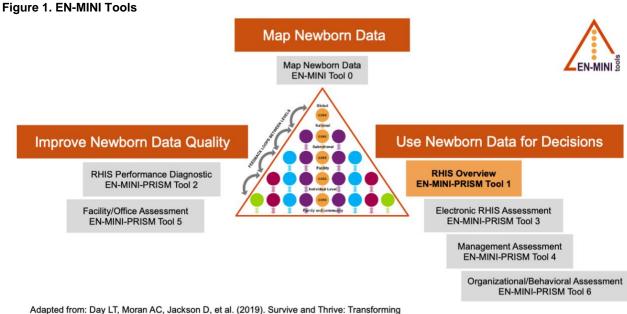
Finally, we thank D4I's Knowledge Management team for editorial, design, and production services.

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

# **EN-MINI-PRISM Tools**

This individual tool version is designed to be used alongside <u>the complete set of EN-MINI-PRISM</u> <u>tools</u>. Full acknowledgements, background, abbreviations, overview of the original PRISM series and details of the EN-MINI adaptation can be found in the complete set of EN-MINI PRISM tools.

The EN-MINI-PRISM Tools 1–6 are linked to <u>other EN-MINI tools</u> as shown in Figure 1. This individual tool is the RHIS Overview EN-MINI-PRISM Tool 1.



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.

EN-MINI-PRISM Tool 1 examines technical determinants, including the structure and design of existing information systems in the health sector, 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.

### Data Requirements, Collection, and Management and Analysis

### **Data Entry Platform**

The EN-MINI tools have been set up for direct digital data collection using SurveyCTO and standardized automated analysis. Please see <u>the full EN-MINI-PRISM tool</u> version for further details.

# **RHIS Overview EN-MINI-PRISM Tool 1**

## Purpose

- 1. List the information systems that exist in the country and the type of data they collect.
- 2. List the recording and reporting tools used at health facility, district, and national levels.
- 3. Establish the links among the recording tools maintained at the health facility/community level, and the reports generated by the health facility/community health workers (CHWs).
- 4. Establish the flow of information from health facility/community to each administrative level of the health system.
- 5. Identify the potential overlaps among these information systems.

## Summary of Information Collected Using the RHIS Overview Tool

The RHIS Overview Tool covers:

- **Data collection**. It lists the data recording tools (patient registers, forms, and electronic medical records [EMRs], etc.) used at the health facility, who introduced them, and the type of information captured.
- **Information systems mapping**. It lists the information systems and data transmission tools that exist at each level of the health system, who introduced them, and the type of data reported. Thus, it identifies redundancies, workload, and levels of fragmentation and integration.
- **Information flow**. It illustrates how and when information flows among different levels of the health system, their overlap, and the burden of information and work.

## **Data Collection Methods**

- The overall picture of the RHIS at a national level is assessed via a linked desk-review data element mapping tool
- Review of RHIS standard operating procedures (SOPs) are captured via linked mapping tool and completed via group discussion with the RHIS unit and health program staff at the national level.
- The above information collected at the national/regional level should be verified by using PRISM Tool 1 tool during health facility and district health office visits
- All sections of EN-MINI-PRISM Tool 1 are to be used at the facility level
- EN-MINI-PRISM Tool 1, section 4 can also be used at the district health office level to verify data

# **RHIS Overview EN-MINI-PRISM Tool 1**

Survey facilit	ator		
RHIS_101	Survey date		
RHIS_102	Facilitator name		
RHIS_103	Facilitator code Enter your 2-character identifier.		
RHIS_104	Type of facility (Country-specific: adapt to the local country context and health system structure)	<ol> <li>National referral hospital</li> <li>District/provincial hospital</li> <li>Health center</li> <li>Health clinic</li> <li>Health post</li> <li>District health office</li> <li>Regional/provincial health office</li> <li>Central ministry of health (MOH)</li> </ol>	
Unit identifica	ation [Valid for facility types 6–8]		
RHIS_105h	Central/region/state/province Enter the alphanumeric code that identifies this level.		
RHIS_106h	District Enter the alphanumeric code that identifies this district. [Valid when the type of facility is 6]		
RHIS_108h	Unit name		
RHIS_109h	Location of the unit Town/city/village		
RHIS_110h	Office(s) visited Note: It could be one or more offices from which information is collected. Please list them here.		

Facility ident	ification [Valid for facility types 1–5]	
RHIS_105f	Region/state/province Enter the alphanumeric code that identifies this level.	
RHIS_106f	District Enter the alphanumeric code that identifies this district.	
RHIS_107f	Health facility number Enter a 10-digit unit number. Include leading zeros.	
RHIS_108f	Health facility name	
RHIS_109f	Location of the unit Town/city/village	
RHIS_111f	Urban/rural	1. Urban 2. Rural
RHIS_112f	Managing authority	<ol> <li>Government/public</li> <li>Nongovernmental organization (NGO)/ not-for-profit</li> <li>Private-for-profit</li> <li>Mission/faith-based/community-based organization (CBO)</li> <li>Other (specify)</li></ol>
RHIS_113	Survey start time (Use the 24-hour clock system, e.g., 14:30)	

#### [paper tools] To complete the tables in Section 1 and Section 2:

- 1. Ask for copies of the data recording tools or check if the procedures manual lists all data recording tools that are used.
- 2. At the top of each column, list all existing data recording tools (e.g., patient registers, forms, electronic medical records, etc.) in S1\_01 for paper-based tools and S2\_01 for electronic tools.
- 3. Verify if a given recording tool includes the listed type of service or disease information, and mark an "x" in the corresponding row for S1\_02/S2\_02.
- 4. Indicate which organization introduced the recording form and mark an "x" in the corresponding row for S1\_03/S2\_03.

If there are no paper-based recording tools, leave Section 1 blank.

If there are no electronic recording tools, leave Section 2 blank.

#### [paper tools] Added Explanation for EN-MINI-PRISM Tools Adaptation:

This RHIS overview tool can be completed at each facility location where newborn and maternal data are collected, for example:

- The initial point of data collection (e.g., ward or clinical area),
- The individual point data are aggregated and entered into the HMIS (this could be at the ward or in a different location at the facility depending on where the person responsible is based),
- The interface between paper and electronic records (if relevant),
- At any other point in the system, routine data are processed/transferred in a way you assess as applicable (setting specific).

#### Section 1. Paper-based data recording tools

#### Paper-based data recording tools at facility level

#### [paper tools] Added Explanation for EN-MINI-PRISM Tools Adaptation:

This section should be used to verify the information collected during the data element/indicator mapping process, and to capture what is currently happening in practice.

The section: "S1\_01 Name of the registers/form" should be pre-populated with the list of registers and forms identified from the data element/indicator mapping exercise that contain the selected indicators

Collect data from every health facility ward location that is relevant for:

6 Child /Newborn health services – in all inpatient ward settings (postnatal/KMC/neonatal inpatient/special care newborn ward or unit (SCNU)/intensive care newborn ward (NICU)

5 Maternal health services - focus on the time of birth (delivery ward and operation theater)

Mark the corresponding row as per the instructions above.

Add in any additional paper-based registers/forms/tally sheets both informal (handwritten) and formal (printed) that are found, including any intervention specific registers/forms/tally sheets (for example, helping babies breathe, kangaroo mother care etc.)

#### [SurveyCTO] S1\_00. Added Explanation for EN-MINI-PRISM Tools Adaptation:

Collect data from every health facility ward location that is relevant for:

Child/Newborn health services – in all inpatient ward settings (postnatal/KMC/neonatal inpatient/special care newborn ward or unit (SCNU)/intensive care newborn ward (NICU)

And Maternal health services - focus on the time of birth (delivery ward and operation theater)

ł

Include any paper-based registers/forms/tally sheets both informal (handwritten) and formal (printed) that are found, including any intervention specific registers/forms/tally sheets (for example, helping babies breathe, kangaroo mother care etc.)

S1_02. Purpose (type of information recorded)	S1_(	01. Na	me of	the re	gister/f	form					
5.1 Maternal health services - Labor and delivery											
5.2 Maternal health services - Operation theater			U				U				
5.3 Maternal health services - Postnatal ward											
6.1 Child health services - Postnatal ward			U				U				
6.2. Child health services - Kangaroo mother care ward/corner											
6.3. Child health services - Neonatal inpatient care ward											
6.4 Child health services - Special care newborn ward											

6.5 Child newborn	health services - Intensive care ward												
96. Other 	(specify)												
S1_02.1	Please capture an image copy of listed in S1_01. You may photogr relevant. Please ensure that all da in the copy; you may take more th Please also take a copy of any re protocols. If relevant, you can take associated documents. Please ensure you store all data in protocol.	aph, p ata ele nan or gister e a pr	bhotod ement ne ima filling intout	copy, s are age if instru or ph	or sca clearl neces uction otoco	an as y sho ssary. s or py of	wn			ber of	•	ters a ied	nd -

Section 1. Paper-based data recording to	ools													
Paper-based data recording tools at facil	lity lev	vel												
[paper tools] Added Explanation for New This section should be used to verify the info capture what is currently happening in pract The section: "S1_03 Primary organization the registers and forms identified from the data Also add any additional registers and forms	ormati tice. hat inti eleme	ion co <i>roduce</i> ent/ind	llecte ed the licator	d durii e <i>regis</i> <sup>.</sup> mapp	ng the ster/for	data r <i>m"</i> sh xercis	eleme hould l	be pre	e-popu ain the	ulated	with t	he list	t of	d to
S1_03. Primary organization that				ę	S1_01	. Nan	ne of	the re	giste	r/forn	n			
introduced the register/form														
1. MOH (standardized national health information system [HIS] tool)														
2. MOH (program-specific name)														
3. United Nations (UN) agency (name)														
4. Regional/state government														
5. Other partner/donor (name)														
6. Locally customized/developed (including facility based)														
96. Other (specify)														

#### Section 2. Electronic data recording tools at facility level

#### [paper tools]: Added Explanation for Newborn modified PRISM assessment:

This section should be used to verify the information collected process for electronic HMIS/RHIS (e.g., DHIS2), during the data element/indicator mapping and to capture what is currently happening in practice.

The section: "S2\_01. Name of the electronic system" should be pre-populated with any electronic data recording tools/forms that were mapped during the data element/indicator mapping (e.g., DHIS2).

Add in any additional electronic systems identified for newborn (and maternal) health services. Collect data from every health facility ward location that is relevant for:

# 6 Child/Newborn health services – in all inpatient ward settings (postnatal/KMC/neonatal inpatient/special care newborn ward or unit (SCNU)/intensive care newborn ward (NICU)

#### 5 Maternal health services - focus on the time of birth (delivery ward and operation theater)

Mark the corresponding row as per PRISM instructions.

#### [SurveyCTO] Added Explanation for Newborn modified PRISM assessment

Please collect data from every health facility ward location that is relevant for:

Child/Newborn health services – in all inpatient ward settings (postnatal/KMC/neonatal inpatient/special care newborn ward or unit (SCNU)/intensive care newborn ward (NICU)

And Maternal health services - focus on the time of birth (delivery ward and operation theater)

To complete the following section, please ask for copies of the electronic data recording tools.

\*\*Each electronic tool will require its own group. Select "Add group" for each tool. To bypass this section or after the last tool has been entered, select "Do not add".

First, specify a data recording tool (e.g., electronic medical record, etc.).

Then, select the type of service or disease information that it collects.

Also, indicate which organization introduced the electronic tool.

If there are additional electronic recording tools, add another group until all the tools have been entered.

Information and communication technology (ICT) applications/software used for data	S2_0	01. Na	me of	the ele	ctronic	c syste	em				
(ICT) applications/software used for data recording (e.g., Excel, Access, Electronic Medical Record [EMR], District Health Information Software version 2 [DHIS 2], geographic information system [GIS], other software)											
S2_02. Purpose (type of information recorded)											
5.1 Maternal health services – Labor and delivery											
5.2 Maternal health services – Operation theater											
5.3 Maternal health services – Postnatal ward											

6.1 Child health services – Postnatal ward							
6.2. Child health services – Kangaroo mother care ward/corner							
6.3. Child health services – Neonatal inpatient care ward							
6.4 Child health services – Special care newborn ward							
6.5 Child health services – Intensive care newborn ward							
96. Other (specify)							

S2_0	02.1	Please capture an image copy of all electronic data recording tools and documents listed in S2_01. You may photograph, screenshot, or print as relevant. Please ensure that all data elements are clearly shown in the copy; you may take more than one image if necessary. Please also copy any electronic data recording tool filling instructions or protocols. If relevant, you can take a printout or photocopy of associated documents. Please ensure you store all data in line with the data management	Please add the number of electronic data recording tools and documents that have been copied
		protocol.	

Section 2. Electronic data recording tools	s at fa	cility	level								
	S2_0	01. Na	me of	the ele	ectronio	c syste	em				
S2_03. Primary organization that introduced the register/form											
1. MOH (standardized national HIS tool)											
2. MOH (program-specific name)											
3. UN agency (name)											
4. Regional/state government											
5. Other partner/donor (name)											
6. Locally customized/developed (including facility based)											
96. Other (specify)											

#### [paper tools] To complete the mapping sheet:

List all the reporting forms in S3\_01.

Specify if the reports are paper-based, electronic, or both by marking P, E, or B in each column for S3\_02.

For electronic forms, mention what type in the appropriate columns for S3\_03.

Verify if a given reporting form includes the listed type of service or disease information and mark an "x" in the corresponding column for S3\_04.

Indicate which organization introduced the reporting form and mark an "x" in the corresponding column for S3\_05.

### [paper tools] Added Explanation for EN-MINI-PRISM Tools Newborn Adaptation:

Data collectors should list all the facility reporting forms sent and received in S3\_01.

#### [SurveyCTO] Added Explanation for EN-MINI-PRISM Tools Adaptation:

To complete the mapping sheet, create a new group for each reporting form. Select "Add group" for each report. Select " Do not add " to bypass this section or after the last report has been entered, select "Do not add".

Specify the reporting form's name, type, and the electronic system if applicable.

Then select the type of service or disease information contained in the reporting form and which organization introduced the report. Add another group until all the reporting forms have been entered.

Section 3. Information mapping sheet							
S3_01. Name of the report generated by community/health facility/district							
S3_02. Paper-based, electronic, or both? (Mark P, E, or B)							
S3_03. If electronic, type of electronic system (Excel, Access, DHIS 2, GIS, other software)							
S3_04. Type of data reported							
5.1 Maternal health services – Labor and delivery							
5.2 Maternal health services – Operation theater							

5.3 Maternal health services – Postnatal ward								
6.1 Child health services – Postnatal ward								
6.2. Child health services – Kangaroo mother care ward/corner								
6.3. Child health services – Neonatal inpatient care ward								
6.4 Child health services – Special care newborn ward								
6.5 Child health services – Intensive care newborn ward								
96. Other (specify)								
S3_05. Primary organization that introduced the rep	oort		1					
1. MOH (standardized national HIS tool)								
2. MOH (program-specific name)								
3. UN agency (name)								
4. Regional/state government								
5. Other partner/donor (name)								
6. Locally customized/developed (including facility based)								
96. Other (specify)								

#### [paper tools] To complete the information flow sheet:

List all the reports generated at the different levels of the health system in S4\_01.

Specify if the reports are paper-based, electronic, or both in S4\_02.

For electronic reports, mention what type in S4\_03.

In S4\_04, list the levels of the health system (from bottom to top) where data are transmitted and received.

Mark an "x" in the corresponding column/row under S4\_04 for each report listed in S4\_01.

Capture if there is interdepartmental data transmission in the same organizational level by using arrows to indicate the data flow.

#### [paper tools] Added Explanation for EN-MINI-PRISM Tools Adaptation:

Data collectors should focus on any facility reports sent or received and include the newborn or maternal indicators already mapped. Once this has been completed at the facility level, the receiving office can verify the results as listed in S4\_04.

#### [SurveyCTO] Added Explanation for EN-MINI-PRISM Tools Adaptation:

List the levels of the health system (from bottom to top) where data are transmitted and received. Each level will be a group.

Data collectors should focus on any facility reports sent or received and include the newborn or maternal indicators already mapped.

Once this has been completed at facility level, the results can be verified by the receiving office as listed in S4\_04.

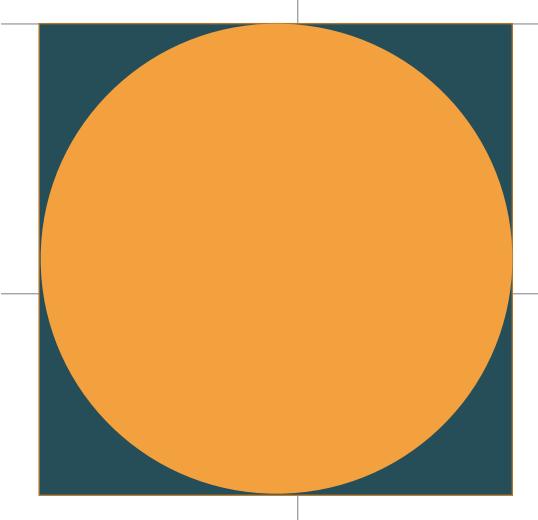
Section 4. Info	mation flow shee	t											
S4_01. Name of the report	S4_02. Paper- based,	S4_03. If electronic, type	S4_	<u>04</u> . V	Wher	e the	e rep	ort is	s sen	t			
generated by the community/ health facility/ district	electronic, or both (Mark P, E, or B)	of electronic system (Excel, Access, DHIS 2, GIS, other software)											
RHIS_114	Survey end time (Use the 24-hour	14:30	))				:			:			

### Data for Impact

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