PRISM: Performance of Routine Information System Management

PRISM Tools for Assessing, Monitoring, and Evaluating RHIS Performance





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Glossary

PRISM	Performance of Routine Information System Management
RHIS	Routine Health Information System
OBAT	Organizational and Behavioural Assessment Tool
MAT	Management Assessment Tool

1. Acknowledgements

1.1. PRISM Tool version 3.0

PRISM Framework and its tools applications have expanded since 2004. Now it has been applied in Pakistan, Uganda, South Africa, Mexico, Paraguay, Honduras, Haiti, China and Cote d'Ivore for assessment and evaluation. It has been applied in diverse countries of Africa, Asia, Latin America and Carribean continents. While these applications showed the strengths and appropriateness of PRISM Framework and its tools in identifying strengths and weaknesses of the routine information systems, they brought some challenges to attention. First, to make a distinction between RHIS performance indicators – accuracy, timeliness and completeness, from their counterpart processes. Second, to keep minimum variables in various tools for triangulation of information to avoid respondent's burden of filling the details. Third, better measurement of use of information. Thus, there was a need to revise the PRISM tools. Uganda PRISM evaluation in 2007 for testing its reliability and validity also helped to make the revisions.

PRISM tools version 3.0 meets old and new challenges in assessing, monitoring and evaluation of RHIS. The authors would like to thank and acknowledge the contributions by the following individuals for revision of PRISM version 2.0.

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1.2. PRISM Tool version 2.0

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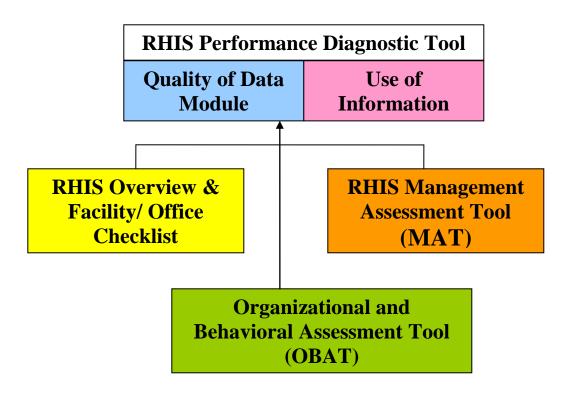
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2. PRISM Tools Summary

PRISM TOOLS



3. RHIS Performance Diagnostic Tool

- 3.1. Data Quality Assessment at District or Higher level
- 3.2. Use of Information Assessment at District or Higher level
- 3.3. Data Quality Assessment at Facility Level
- 3.4. Use of Information Assessment at Facility Level

	C		IIS Perforn f Data Asse		_				orm	l	
Name	of the district			Date							
	of the Assess			Name	and	Titl	e of p	erso	n In	terviewe	d:
			Data '	Transm							
DQ 1	Does the district by health facili						sent	1.Ye	S	0.No	
DQ 2		at is the number of facilities in the district that are supposed e reporting to (enrolled in) RHIS?									
DQ 3	What is the nur reporting to (er	nrolled in)	RHIS?				lly				
DQ 4	Count number available at the			e last two	mont	ths		a.mo	nth	b.month	
DQ 5		What is the deadline for the submission of the RHIS monthly eport by facility?								If no deadline is set, write no and go to Q8	
DQ 6	Does the district report?		•					1.Ye		If receipt dates are not recorded, go to Q8	
	If DQ6 yes, ch				st two					<u>(</u> 4).	
		a. Month (specify) b. Month (specify)									
	Item		1. Before 2. After 3. Before								
DQ 7	Number of faci	ilities	deadline	deadlin	ie	dea	dline		dea	dline	
DQ 8	Does district has report data by a from the facilit	a certain de					ort	1.Ye	S	0.No	
DQ 9	Does district har regional/nation		d of submittin	g data on	time t	to		1.Ye	S	0.No	
			Dat	a Accui	acy						I.
			nber of follow . Compare the	ing data i	tems 1						
	Item	a. Month				_	(specif				
DQ 10		Manual count	Computer	Match	Man		Con	-		Match	
DQ A											
DQ B											
DQ C											
		1	Data Pr	ocessin	g/An	alvs	is		ı		
DQ 11	Does databas	se exist to	enter and proc		0. N			es, by		2. Yes, by computer	7
DQ 12		abase prod	uce the follow	ing?			•				
DQ 12A	1 (Calculate ir	dicators for ea	ach facilit	y catc	hmer	nt area	1.5	Zes .	0.No	
DQ 12B	3		Data sum	mary repo	ort for	the c	distric	1.	Zes .	0.No	
DQ 12C	2			mparisons					Zes .	0.No	
DQ 12D)	C	Comparisons w	ith distric	t/natio	onal t	targets	1.5	Zes .	0.No	
DQ 12E	B	Compa	risons among	types of s	ervice	es co	verage	1.5	Zes .	0.No	
DQ 12F	Con		of data over ti					_	Zes .	0.No	

DQ13	Do you think that RHIS procedure manual is user-friendly?	1.Yes	0.No	
DQ 14	Do you think that monthly report form is complex and difficult to follow?	0.yes	1.no	
DQ 15	Do you find the data software user-friendly?	1.Yes	0.No	
DQ 16	Do you find that information technology is easy to manage?	1.Yes	0.No	
DQ 17	Do you think that information system design provide comprehensive picture of health system performance?	1.Yes	0.No	
DQ 18	Do you think RHIS has information that is spread over in different information system?	1.Yes	0.No	
DQ 19	Does the RHIS software integrate data from different information systems?	1.Yes	0.No	
DQ 20	Does the information technology (LAN) exist to provides access to information to all district managers and senior management	1.Yes partially	2.Yes completely	0.No
DQ 21				
DQ 22				
DQ 23				
DQ 24				
DQ 25				

		S Performance Di				
	Use of Inf	ormation District	Assessme	nt For	m	
		Name of assessor:				
District	t:	Name of respondent a	nd title:			
		RHIS report producti	ion			
DU1	Does this district office comp	oile RHIS Data submitted	by facilities?	1.Yes	0.No	
DU2	Does the district issue any rep	port containing RHIS info	rmation?	1.Yes	0.No	If no, go to DU4
DU3	If yes, Please list reports that	contain data/information	generated throu	gh RHIS	. Please	
	indicate frequency of reports	and the number of times t	he report was a	ctually is	sued for	
	the last 12 months. Please con	nfirm the issuance of the 1		ng them.		
	1. Title of the report		2.No. of		times that	
			times this report is		e actually r the last 12	
			supposed to be issued per	months	r the last 12	
DIV			year			
DU3a						
DU3b						
DU3c						
DU3d						
DU3e	D. 1.1. 11	C 11 1	T.C.	1 77	0.37	
DU4	Did the district office send a		IS	1.Yes	0.No	
	information to facilities for th		- 4.9			
DITE	D 1 1 1	Display of inform			. 1' 1	TC
DU5	Does the district office displated and whether the data are updated as a second and the data are updated as a second and the data are updated as a second and the data are updated as a second as a second and the data are updated as a second as			es of dat	a dispiays	If no go to DU6
	1.Indicator	2. Type of display (Pl		3. Upda	ntad	D06
DU5a	Related to mother health	Table	ease tick)	1.Yes	0.No	
Dosa	Related to mother health	Graph/Chart		1.168	0.110	
		Map/other		1		
DU5b	Related to child health	Table		1.Yes	0.No	
טכטט	Kelated to clind health	Graph/Chart		1.168	0.110	
		Map/other		1		
DU5c	Facility Utilization	Table		1.Yes	0.No	
שטטט	Tacinty Ounzation	Graph/Chart		1.168	0.110	
		-		1		
DU5d	Disease surveillance	Map/other Table		1.Yes	0.No	
שטטע	Disease surveillance	Graph/Chart		1.168	0.110	
		Map/other		1		
DU6	Does the office have a map o			1.Yes	0.No	
	•					
DU7	Does the office display a sum		ormation such	1.Yes	0.No	
	as population by target group	8 !				

Is feedback, quarterly, yearly or any other report on RHIS day available, which provides guidelines/recommendations for actions?	1.Y	es	0.N	o	If no go to DU10	
If yes to DU8, what kinds of decisions are made in reports of RHIS data/information for actions? Please check types of decisions					D010	
Appreciation and acknowledgement based on Number/perc of facilities showing performance within control limits over	er time	1.Y	es	0.N	О	
Mobilization/shifting of resources based on compari	son by	1.Y	es	0.N	О	
(sub-districts, cities, villages), human resources and lo	gistics					
Development of policies by comparing types of se	ervices	1.Y	es	0.N	o	
Discussion and decisions on use of information		1.Y	es	0.N	О	
Does the district office have routine meetings for reviewing managerial or administrative matters?		1.Y	es	es 0.No		
How frequently is the meeting supposed to take place?						
How many times did the meeting take place during the last the months?	hree					
Is an official record of management meetings maintained?	1.	0.N			no, go U15	
If yes, please check the meeting records for the last three mo following topics were discussed:	onths to	see if	the			
timeliness of reporting				0. 1	Vo	
disease data, or service coverage, medicine stock out						
discussions?						
made during the previous meetings?						
regional/national level for actions?		servec	l	0.1	No	
information?	IS	1.Y	es			
three months showing success stories of use of information	ı last					
Does documentation of use information for various types of advocacy exist?		1.Y	es	0.N	o	
Does the district staff meeting records show attendance of pe	1 Y	es	0.N	О		
	available, which provides guidelines/ recommendations for actions? If yes to DU8, what kinds of decisions are made in reports of RHIS data/information for actions? Please check types of debased on types of analysis present in reports. Types of decisions based on types of analysis Appreciation and acknowledgement based on Number/perc of facilities showing performance within control limits ow (month to month compa Mobilization/shifting of resources based on comparing to the decision of the decision of the decision of the decision of the decisions and decisions on use of information Description and decisions on use of information Does the district office have routine meetings for reviewing managerial or administrative matters? How frequently is the meeting supposed to take place? How many times did the meeting take place during the last the months? Is an official record of management meetings maintained? If yes, please check the meeting records for the last three months? Is an official record of management meetings maintained? If yes, please check the meeting records for the last three months? Is an official record of management meetings maintained? If yes, please check the meeting records for the last three months? Is an official record of management meetings maintained? If yes, please check the meeting records for the last three months? Is an official record of management meetings maintained? If yes, please check the meeting records for the last three months? Ananagement of RHIS, such as data quality, reporting, or timeliness of reporting Discussion on RHIS findings such as patient utilization, disease data, or service coverage, medicine stock out Have they made any decisions based on the above discussions? Are there any RHIS related issues/problems referred to regional/national level for actions? Promotion and Use of RHIS information at district/highed district/national RHIS office publish newsletter/report in three months showing success stories of use of information Does documentation of	available, which provides guidelines/ recommendations for actions? If yes to DU8, what kinds of decisions are made in reports of RHIS data/information for actions? Please check types of decision based on types of analysis present in reports. Types of decisions based on types of analysis Appreciation and acknowledgement based on Number/percentage of facilities showing performance within control limits over time (month to month comparisons) Mobilization/shifting of resources based on comparison by facilities Advocacy for more resources by comparing performance by areas (sub-districts, cities, villages), human resources and logistics Development of policies by comparing types of services Discussion and decisions on use of information Does the district office have routine meetings for reviewing managerial or administrative matters? How frequently is the meeting supposed to take place? How many times did the meeting take place during the last three months? Is an official record of management meetings maintained? If yes, please check the meeting records for the last three months to following topics were discussed: Management of RHIS, such as data quality, reporting, or timeliness of reporting Discussion on RHIS findings such as patient utilization, disease data, or service coverage, medicine stock out Have they made any decisions based on the above discussions? Has any follow-up action taken place on the decisions made during the previous meetings? Are there any RHIS related issues/problems referred to regional/national level for actions? Promotion and Use of RHIS information at district/higher level Did district annual action plan showed decisions based on HIS information? Did records of district office of last three months show that district/senior management issued directives on use of information Does documentation of use information for various types of advocacy exist?	available, which provides guidelines/ recommendations for actions? If yes to DU8, what kinds of decisions are made in reports of RHIS data/information for actions? Please check types of decision based on types of analysis present in reports. Types of decisions based on types of analysis Appreciation and acknowledgement based on Number/percentage of facilities showing performance within control limits over time (month to month comparisons) Mobilization/shifting of resources based on comparison by facilities Advocacy for more resources by comparing performance by areas (sub-districts, cities, villages), human resources and logistics Development of policies by comparing types of services 1. Y Discussion and decisions on use of information 1. Y Does the district office have routine meetings for reviewing managerial or administrative matters? How frequently is the meeting supposed to take place? How many times did the meeting take place during the last three months? Is an official record of management meetings maintained? 1. Yes If yes, please check the meeting records for the last three months to see if following topics were discussed: Management of RHIS, such as data quality, reporting, or timeliness of reporting Discussion on RHIS findings such as patient utilization, disease data, or service coverage, medicine stock out Have they made any decisions based on the above discussions? Are there any RHIS related issues/problems referred to regional/national level for actions? Promotion and Use of RHIS information at district/higher level Did district annual action plan showed decisions based on HIS information? Did records of district office of last three months show that district/senior management issued directives on use of information Did district/national RHIS office publish newsletter/report in last three months showing success stories of use of information Does documentation of use information for various types of advocacy exist?	available, which provides guidelines/ recommendations for actions? 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Did records of district office of last three months show that district/senior management issued directives on use of information Did district/national RHIS office publish newsletter/report in last three months showing success stories of use of information Does documentation of use information for various ty	available, which provides guidelines/ recommendations for actions? If yes to DU8, what kinds of decisions are made in reports of RHIS data/information for actions? Please check types of decision based on types of analysis present in reports. Types of decisions based on types of analysis Appreciation and acknowledgement based on Number/percentage of facilities showing performance within control limits over time (month to month comparisons) Mobilization/shifting of resources based on comparison by facilities Advocacy for more resources by comparing performance by areas (sub-districts, cities, villages), human resources and logistics Development of policies by comparing types of services Discussion and decisions on use of information Does the district office have routine meetings for reviewing managerial or administrative matters? How frequently is the meeting supposed to take place? How many times did the meeting take place during the last three months? Is an official record of management meetings maintained? 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If yes to DU8, what kinds of decisions are made in reports of RHIS data/information for actions? Please check types of decision based on types of analysis present in reports. Types of decisions based on types of analysis Appreciation and acknowledgement based on Number/percentage of facilities showing performance within control limits over time (month to month comparisons) Mobilization/shifting of resources based on comparison by facilities Advocacy for more resources by comparing performance by areas (sub-districts, cities, villages), human resources and logistics Development of policies by comparing types of services Discussion and decisions on use of information Does the district office have routine meetings for reviewing managerial or administrative matters? How frequently is the meeting supposed to take place? How many times did the meeting take place during the last three months? If yes, please check the meeting records for the last three months to see if the following topics were discussed: Management of RHIS, such as data quality, reporting, or timeliness of reporting Discussion on RHIS findings such as patient utilization, disease data, or service coverage, medicine stock out Have they made any decisions based on the above discussions? Are there any RHIS related issues/problems referred to pregional/national level for actions? Promotion and Use of RHIS information at district/higher level Did district annual action plan showed decisions based on HIS information? Did district/national RHIS office publish newsletter/report in last three months showing success stories of use of information Does documentation of use information for various types of advocacy exist?

DU20: Please describe examples of how the district office uses RHIS information for health system management 0. No examples 1. Yes (details follows)

DU21	
DU22	
DU23	
DU24	
DU25	

				nce Diagr						
				ment: Hea	ılth 1					
Date of	of Assessment:				Name and Title of person				on	
						Interv	viewe	ed:		
Distri	ct	Facility				Type				
			Data l	Recording						
FQ1	Does this facility kee the district office?					1.Ye	es	0.1		If no, go to FQ5
FQ 2	Count the number of facility for the last 12		thly reports	that are kept	at the					
FQ 3	Does this facility kee		t register?			1.Ye	es	0.No		If no, go to FQ5
		I	Data Acc	uracy Che	ck					
	Find the following in does not keep the copcomplete the exercise	y of the mo	onthly repo the figures	rt, obtain the with the repo	copy a	t the dis	trict o	office an		
FQ 4	Item		a. Month			onth (sp				
rų 4			# from register	# from report	# fro	m regis	ter	# from	report	
4A										
4B										
4C										
4D										
FQ 5	Did you receive a dir	ective from	the Senior	Management	/distri	ct office	to:			
	5A Check the data	accuracy a	t least once	e in three mor	nths?		1.Ye	,	0. No	
	5B Fill the month	ly report for	rm complet	ely			1.Ye Obse	s,	0. No	
	5C Submit report	by declared	deadline				1.Ye Obse	,	0. No	-
FQ 6	Did you receive a dir will be consequences		the Senior	Management	/distri	ct office	that t	here		
	6A if you do not c		ta accuracy	7			1.Ye Obse		0. No	
	6B If you do not f	ill the mont	hly reporti	ng form comp	oletely		1.Ye Obse	,	0. No	
	6C If you do not s	ubmit the n	nonthly rep	ort by declare	ed dea	dline	1.Ye Obse		0. No	
			Data C	ompletene	SS					
FQ 7	What is the number of		s in the RH	IS monthly re	port tl		ity			
	need to report? Exclu provided by this heal		nber of data	a items for ser	rvices	not				
FQ 8	Count the number of facility but left blank	data items t								
				Data Proce		_	ysis	1		1
FQ 9	Does data processing					1. Yes, (ed	0. No	
FQ 10	Does the facility prod	-	<u> </u>		I				1	
FQ A				acility catchm	ent are	ea 1. Y	es, Ol	served	0. No	
FQ B				istrict/nationa				served	0. No	
FQ C		nparisons aı	mong types	of services c	overag	ge 1. Y		served	0. No	
FQ D				nonitoring ov		/		oserved	0. No	
FQ 11	Does the procedure n	nanual for d	lata collect	on/definition	s exist	? 1. Y	es, Ol	oserved	0. No	

FQ 12	
FQ 13	
FQ 14	
FQ 15	
FQ 16	

		Performance D	_						
D :	Use of Info	rmation: Facilit	•	ent Foi	<u>rm</u>				
Date:		Name of as							
Facility			espondent and tit	le:					
Facility	Type:	District:				T			
		RHIS report production							
FU1	Does this facility compile RH			1.Yes	0.No				
FU2	Does the facility compile any	report containing RHIS	S information?	1.Yes	0.No	If no, go to FU4			
FU3	If yes, Please list reports that	contain data/informatio	on generated thro	ugh RHI	S. Please				
	indicate frequency of reports	and the number of time	s the report was	actually i	ssued for				
	the last 12 months. Please con	nfirm the issuance of th	e report by obse	rving it.					
	1. Title of the report		2. No. of		times that				
			times this report is		e actually r the last 12				
			supposed to	months	i tile last 12				
			be issued per						
			year						
FU3a									
FU3b									
FU3c									
FU3d									
FU4	Did the facility receive any fe		trict office on	1.Yes	0. No				
	their performance for the last								
		Display of informat							
FU5	Does the facility display the f			data disp	olays and	If no go to FU6			
		whether the data are updated for the last reporting period.							
	1. Indicator	2. Type of display (Pleas	e tick)	3. Upda	ated				
FU5a	Related to mother health	Table		1.Yes	0.No				
		Graph/Chart		4					
FU5b	Related to child health	Map/other Table		1 37	0.No				
FUSD	Related to child health	Graph/Chart		1.Yes	U.NO				
		Map/other							
FU5c	Facility Utilization	Table		1.Yes	0.No				
		Graph/Chart							
DI IF 4	Diagona aumyaillanaa	Map/other Table		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1					
FU5d	Disease surveillance	Graph/Chart		1.Yes	0.No				
		Map/other		1					
FU6	Does the facility have a map	of catchment area?		1.Yes	0.No				
FU7	Does the office display a sum		nformation	1.Yes	0.No				
	such as population by target g								
FU8	Is feedback, quarterly, yearly available, which provides gui	or any other report on		1.Yes	0.No	If no go to FU10			

FU9	If yes, what kinds of decisions are made in reports of RHIS data/information for								
	actions? Please check on types of decision based on types of analyses present in reports.								
	Types of decisions based on types of analyses								
FU9a	Review strategy by examining service performance ta	arget and	1.Yes	0.No					
1074	actual performance on month to month con		1.103	0.110					
FU9b	Review facility personnel responsibilities by examinin	1.Yes	0.No						
. 070	target and actual performance on month to month con		1.105	0.110					
FU9c	Mobilization/shifting of resources based on comparison by		1.Yes	0.No					
FU9d	Advocacy for more resources by comparing performance by		1.Yes	0.No					
		ving gaps		""					
	Discussion and Decision on RHIS information	001							
FU10	Does the facility have routine meetings for reviewing mana	agerial or	1.Yes	0.No	If no, go to				
	administrative matters?	U			UI15				
FU11	How frequently is the meeting supposed to take place?			•					
FU12	How many times did the meeting take place during the last	three							
	months?								
FU13	Is an official record of management meetings maintained?	1.Yes		0.No	If no, go to UI15				
FU14	If yes, please check the meeting records for the last three i	;							
	following topics were discussed:								
FU14a	Management of RHIS, such as data quality, reporting, or	1.Yes, observed		0. No					
	timeliness of reporting								
FU14b	Discussion on RHIS findings such as patient utilization,	1.Yes, obs	served	0. No					
	disease data, or service coverage, medicine stock out								
FU14c	Have they made any decisions based on the above discussions?	1.Yes, obs	served	0. No					
FU14d	Has any follow-up action taken place on the decisions made during the previous meetings?	1.Yes, obs	served	0. No					
FU14e	Are there any RHIS related issues/problems referred to regional/national level for actions?	1.Yes, obs	served	0. No					
	Promotion and Use of RHIS information by the district/higher level								
FU15	Observed facility received annual/monthly planned targets		1.Yes	0.No					
	RHIS information			""					
FU16	Did records of facility of last three months show that distric	ct/senior	1.Yes	0.No					
	management issued directives on use of information								
FU17	Did facility receive district/national RHIS office newsletter	r/report	1.Yes	0.No					
	in last three months showing success stories of use of infor								
FU18	Did documentation exist to show use information for vario	us types	1.Yes	0.No					
	of advocacy exist?								
FU19	Did the person in charge of the facility participate in meeting	ngs at	1.Yes	0.No					
	district level to discuss RHIS performance for the last three	2							
	months?								

FU20: Please describe examples of how the facility uses RHIS information for health system management

0. No examples 1. Yes (details follows)

	Supervision by the district health office						
FU21	How many times did the district supervisor visit your facility during the last three months? (check the answer)	0. 1. 2 3. 4. >3		If zero, go to FU26			
FU22	Did you observe supervisor having a checklist to assess the data quality?	1.Yes	0.No				
FU23	Did supervisor check the data quality?	1.Yes	0.No				
FU24	Did the district supervisor discuss performance of health facilities based on RHIS information when he/she visited your facility?	1.Yes	0.No				
FU25	Did the supervisor help you make a decision based on RHIS information?	1.Yes	0.No				
FU26	Did the supervisor send a report/feedback/note on the last two supervisory visits?	1.Yes	0.No				
FU27							
FU28							
FU29							
FU30							
FU31							

4. Information Systems Overview and Resources

- 4.1. Information System Mapping
- 4.2. Facility/Office checklist

Routine Health Information System Overview Overview of Information Systems in Health Sector

	Overview of information systems in Health Sector
	(Interview HIS Manager at district and sub-national level)
Level:	□ National
	☐ Sub-national (district, province, etc)
	Name (of district, province, etc)
Respond	ent's Name:
Function	/Title:
Institutio	on:
Departm	ent:
Mapping	g existing routine information systems in health sector (OPTIONAL)
	e sheet 1: "Information system mapping", list all routine information systems existing untry/region/district.
(or not in	rcise will help you to understand types of health sector information that are included neluded) by information systems. It will also help to identify duplication of ion systems.
1) Write	e down specific names of the information systems.
also infor "vac	tify types of information covered by each system and check relevant boxes. You may write comments in the box. For example, an information system for EPI may handle mation on drug supplies but it might be limited to vaccines. You can indicate cine only" in the box. Similarly, MCH specific information systems may collect mation on service utilization of MCH services only.
	se describe how information from different information systems are shared. For aple, between TB programs and HIV/AIDS programs

	_		1: Inforr	nation Syster							
				Types of Infor	mation Ha	andled by Ea	ch Syster	ms			
Type of information system	Specific name if any	Service Utilization	Occurrence of selected disease(s)	Disease Outbreak (Immediate report)	Financial Information	Drug, contraceptive vaccine, stock	Human resources	Equipment/ Building	Vital Events	Others	Others
Routine service based reporting system											
Epidemiological surveillance for notifiable infectious diseases											
Special program reporting systems (EPI)											
Special program reporting systems (TB)											
Special program reporting systems (Malaria)											
Special program reporting systems (HIV/AIDS) Special program reporting											
systems (MCH) Special program reporting											
systems (specify) Special program reporting											
systems (specify) Special program reporting											
systems (specify) Community Base											
information system Administrative system (Finance)											
Administrative system (human resource)											
Administrative system (Training)											
Administrative system (drugs, contraceptive, vaccine, logistics)											
Administrative system (Infrastructure, equipment, transport)											
Vital Registration											
Other system											

2. Data collection and transmission	
Please list all data collection tools/forms that are used at t If space is not enough, please add an additional sheet of p	
Facility-based data collection tools: (such as patient registers)	Comments on tools. Is the form easy to use? Enough space to record data? Takes too much time?
•	
•	
•	
•	
•	
•	
Data transmission/reporting forms	Comments on forms. Is the form easy to use? Enough space to record data? Takes too much time?
•	
•	
•	
•	
•	
•	

3. Information flowchart

Using the chart provided on the next page, illustrate the flow of information from community to health facility, health facility to district level, district level to regional level, regional level to the central/national level. For each level, please indicate specific departments/job titles which should receive and process information received from a lower level.

This exercise will help you to clarify information flows in existing information systems and identify potential problems, which affect the performance of the information systems.

- 1) If some levels, e.g. community level and regional level are not relevant to systems that you are examining, please omit them from the exercise.
- 2) Please be as specific in identifying information sources and data transmission points as possible. For example, if different types of facilities have different reporting units at district level, you will want to indicate these different paths of information.
- 3) Add more than one information system to see interactions between information systems and how complicated or simple information flows are in your health system. You can see how basic routine health information system's information flow interacts with special program information systems such as EPI, HIV/AIDS, and Malaria.
- 4) You can be creative in indicating different information flows in different colors. For example, you can indicate the data aggregation process in red and the information feedback process in blue color. Or General RHIS in green and EPI in pink, etc.

Information flowchart

	Information flowchart Information Flow Sheet								
Levels		Types of Information Systems							
	SIWH	EPI	TB	Malaria	HIV/AIDS	МСН	Contraceptive	Administrative system (Finance)	Community information system
Central/national Level									
Regional Level (Province)									
District Level									
Facility Level									
Community Level									

Facility/Office Checklist (Interview Facility Manager or person in charge of RHIS at the office) Person Interviewed (name, title, organization) Facility/Office Name Facility/Office Address Facility Type (Hospital/Clinic/District office/Region office/Ministry RHIS unit, etc.) Ownership (Public/Private/Mixed)

(Interviewer: Please verify if the following equipment is available in the facility)

1. Equipment					
Hardware Equipment	Total Quan	tity	How many are in working condition?		
a. Computer					
b. Data Back-up Unit (e.g. floppy, CD, zip)	0. No	1. Yes			
c. Printers					
d. Modems					
e. UPS					
f. Generators					
g. Regular telephone					
h. Radio telephone					
i. Access to the internet	0. No	1. Yes			
j. Calculator					

2. Utilities			
a. Is there a continuous electricity supply?	1. Yes	0. No	
b. How often is the electricity supply interrupted? 0. Never/occasionally 1. Once a month	2. Twice a month	3. Weekly	4. Daily
c. Is the room, where the computer hardware is kept, air-conditi	oned? 1. Yes	0. No	
d. Is running water available in the facility?	1. Yes	0. No	

3. Availability of registers, forms						
Type of record, report or register	Have you run out of this form in the past 12 months? If so, why?					
a.	0.No 1. Yes					
b.	0.No 1. Yes					
c.	0.No 1. Yes					
d.	0.No 1. Yes					
e.	0.No 1. Yes					

	B. O	rganizat	ion of the health fa	ncility	
	tal number of pe	rsons und	ler each category belo	ow: (Adapt according to the	country
situation) B.2. Title/ post		Number			Number
1. Medical officer		rvamoei	10. Health educa		Tuilloci
2. Comprehensive nurse	C		11. Health inspe		
3. Comprehensive nurse	enrolled		12. Laboratory	technician	
4. Nursing Assistance			13. Public health	n dental assistant	
5. Clinical officer			14. Anesthetic o	fficer	
6. Laboratory Assistant			15. Midwife		
7. Health Assistant			16. Support staf	f	
8. Dispenser			17. Other (speci	fy)	
9. Health information as	ssistant				
B.3. Who fills in the HM	MIS monthly rep	orts? <i>Spe</i>	cify the codes from Q	B.2.	
B.4. List those staff men	mbers who recei	ved any t	raining in the recording	ng, processing, or reporting ed, and the year of the lates	
B.4.a. Title or Post (Coding from QB.2)	B.4.b. How r trainings courses/sessi this person re in the past th years?	many ons did	B.4.c. Year of last training?	B.4.d. Subjects of las 1. data collection 2. data analysis 3. Data display/re 4. 1&2 5. 1&3 6. 2&3 7. 1,2 & 3	t training:
1.					
2.					
3.					
4.					
5.					

BB1. Only for District or Higher level					
Staffing					
BB.1 Total number of persons working in district HMIS office including sub-districts?					
BB.2 Total number of persons working in district HMIS office excluding sub-districts?					
BB.3 Total number of district staff in district HMIS office trained to collect, verify and					
analyze information?					

5. Management Assessment Tool

	RHIS Management Assessment Tool							
	(Observation at facility and higher levels)							
MAT1. N	MAT1. Name of the facility MAT2. Name of the Assesser							
MAT3. N	ame of the district	MAT4: date	of assessmen	ıt				
MATG1	Presence of RHIS Mission displayed	at prominen	t position(s)		0 No	1 Yes		
MATG2	Presence of management structure for strategic and policy decisions at distr	or dealing wit	h RHIS relate	ed	0 No	1 Yes		
MATG3	Presence of an updated (last year) dis organizational chart, showing function information	strict health r	nanagement		0 No	1 Yes		
MATG4	Presence of distribution list and documenthly/quarterly report distribution				0 No	1 Yes		
MATP1	Presence of RHIS situation analysis report less than 3 year old					1 Yes		
MATP2	Presence of RHIS 5 year plan at district or higher level					1 Yes		
MATP3	Presence of RHIS targets at facility and higher level					1 Yes		
MATQ1	Presence of a copy of RHIS standard	ls at district of	r higher level	S	0 No	1 Yes		
MATQ2	Presence of a copy of RHIS standard	s at facility			0 No	1 Yes		
MATQ3	Presence of performance improveme chart etc.) at the facility	nt tools (flow	v chart, contro	ol	0 No	1 Yes		
MATT1	Does facility/district have a RHIS tra	ining manua	1?		0 No	1 Yes		
MATT2	Presence of mechanisms for on-job F documentation)	RHIS training	g (see		0 No	1 Yes		
MATT3	Presence of schedule for planned training	0 No	1. Yes, for one year		Yes, 2 y	ears or		
MATS1	Presence of RHIS supervisory check	list	<u> </u>		0 No	1 Yes		
MATS2	Presence of schedule for RHIS super				0 No	1 Yes		
MATS3	Presence of supervisory reports	y 11010			0 No	1 Yes		
MATF1	Presence of RHIS related expense re	gister			0 No	1 Yes		
MATF2	Presence of mechanisms for generati		RHIS		0 No	1 Yes		
MATF3	Presence of RHIS monthly/quarterly				0 No	1 Yes		
MATF4	Presence of long term financial plan activities				0 No	1 Yes		

6. Organizational and Behavioral Assessment Tool

Organizational and Behavioural Assessment Tool

(To be filled by staff and management at all levels)

T		4	1		4 •	
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improv Your r	This survey is part of the, to improve Management Information systems in the health sector. The objective of this survey to help develop interventions for improving information system and use of information. Please express your opinion honestly. Your responses will remain confidential and will not be shared with anyone, except for presented table forms. We appreciate your assistance and co-operation in completing this study.						
Thank	you.						
IDI.	Name of facility						
ID2.	District						
DD1.7	Title of the person filling (Make the 1. Provincial DG 2. Provincial HMIS to 3. District HO 4. District HMIS foc 5. Facility in charge 6. Other facility staff	ese categories a focal person al person	ppropriate to the host country)				
DD2.	Age of the person						
DD3.	Sex	1. Male	2.Female				
DD4.	Education 1. 10 years 2. Intermed 5. Professional diplom 6. Other (specify)	na/degree (specif	• •				
DD5.	Years of employment						
DD6. l	Did vou receive any trai	ning in HMIS re	elated activities in last six months? 0. No. 1.Y	'e			

We would like to know your opinion about how strongly you agree with certain activities carried out by _______. There are no right or wrong answers, but only expression of your opinion on a scale. The scale is about assessing the intensity of your belief and ranges from strongly disagree (1) to strongly agree (7). You have to determine first whether you agree or disagree with the statement. Second decide about the intensity of agreement or disagreement. If you disagree with statement then use left side of the scale and determine how much disagreement that is – strongly disagree (1), somewhat disagree (2) or disagree (3) and circle the appropriate answer. If you are not sure of the intensity of belief or think that you neither disagree nor agree then circle 4. If you agree with the statement, then use right side of the scale and determine how much agreement that is – agree (5), somewhat agree (6) or strongly agree (7) and circle the appropriate answer. Please note that you might agree or disagree with all the statements and similarly you might not have the same intensity of agreement or disagreement and thus variations are expected in expressing your agreement or disagreement. We encourage you to express those variations in your beliefs.

This information will remain confidential and would not be shared with anyone, except presented as an aggregated data report. Please be frank and choose your answer honestly.

Strongly disagree	Somewhat disagree	Disagree	Neither Agree disagree		Somewhat agree	Strongly agree		
			nor agree					
1	2	3	4	5	6	7		

To what extent, do you agree with the following on a scale of 1-7?

In health department, decisions are based on

	Strongly disagree	Somewhat disagree	disagree	Neither disagree nor agree	Agree	Somewhat agree	Strongly agree
D1. Personal liking	1	2	3	4	5	6	7
D2. Superiors' directives	1	2	3	4	5	6	7
D3. Evidence/facts	1	2	3	4	5	6	7
D4. Political interference	1	2	3	4	5	6	7
D5. Comparing data with strategic health objectives	1	2	3	4	5	6	7
D6. Health needs	1	2	3	4	5	6	7
D7. Considering costs	1	2	3	4	5	6	7

	Strongly disagree	Somewhat disagree	disagree	Neither disagree nor agree	Agree	Somewhat agree	Strongly agree
In health department, superiors							
S1. Seek feedback from concerned persons	1	2	3	4	5	6	7
S2. Emphasize data quality in monthly reports	1	2	3	4	5	6	7
S3. Discuss conflicts openly to resolve them	1	2	3	4	5	6	7
S4. Seek feedback from concerned community	1	2	3	4	5	6	7
S5. Use HMIS data for setting targets and monitoring	1	2	3	4	5	6	7
S6. Check data quality at the facility higher level regularly	and 1	2	3	4	5	6	7
S7. Provide regular feedback to their regular report based on evidence	staff thi	rough 2	3	4	5	6	7
S8. Report on data accuracy regularly	y 1	2	3	4	5	6	7
In health department, staff							
P1. Are punctual	1	2	3	4	5	6	7
P2. Document their activities and keep records	1	2	3	4	5	6	7
P3. Feel committed in improving health status of the target population	1	2	3	4	5	6	7
P4. Set appropriate and doable target of their performance	1	2	3	4	5	6	7
P5. Feel guilty for not accomplishing the set target/performance	1	2	3	4	5	6	7
P6. Are rewarded for good work	1	2	3	4	5	6	7

_							
	Strongly disagree	Somewhat disagree	disagree	Neither disagree nor agree	Agree	Somewhat agree	Strongly agree
In health department, staff							
P7. Use HMIS data for day to day management of the facility and district 1	2	3	4	5	6	7	
P8. Display data for monitoring their set target	1	2	3	4	5	6	7
P9. Can gather data to find the root cause(s) of the problem	1	2	3	4	5	6	7
P10. Can develop appropriate criteria interventions for a given problem	for sele	ecting 2	3	4	5	6	7
P11. Can develop appropriate outcome for a particular intervention	nes 1	2	3	4	5	6	7
P12. Can evaluate whether the target or outcomes have been achieved	s 1	2	3	4	5	6	7
P13. Are empowered to make decisions	1	2	3	4	5	6	7
P14. Able to say no to superiors and colleagues for demands/decisions not supported by evidence	1	2	3	4	5	6	7
P15. Are made accountable for poor performance	1	2	3	4	5	6	7
P16. Use HMIS data for community education and mobilization	1	2	3	4	5	6	7
P17. Admit mistakes for taking corrective actions	1	2	3	4	5	6	7
Personal							
BC1. Collecting information which i decision making discourages me	s not use	ed for 2	3	4	5	6	7
BC2. Collecting information makes me feel bored	1	2	3	4	5	6	7

	Strongly disagree	Somewhat disagree	disagree	Neither disagree nor agree	Agree	Somewhat agree	Strongly agree	
BC3. Collecting information is meaningful for me	1	2	3	4	5	6	7	
BC4. Collecting information gives me the feeling that data is needed for monitoring facility performance	1	2	3	4	5	6	7	
BC5. Collecting information give me Feeling that it is forced on me	e the 1	2	3	4	5	6	7	
BC6. Collecting information is appreciated by Co-workers and superiors 1 2 3 4 5 6 7								

U1.Describe at least three reasons for collecting data on monthly basis on the followings:

U1A.	Diseases
------	----------

- 1.
- 2.
- 3.

U1B. Immunization

- 1.
- 2.
- 3.

U1C. Why is population data of the target area needed?

- 1.
- 2.
- 3.

U2. Describe at least three ways of checking data quality.

- 1.
- 2.
- 3.

Dr. Akram, EDO Health, read a recent district report on data quality and felt very disturbed by it. "I need to take actions", he said aloud. He paced back and forth thinking about his next steps to improve data quality. After some time, he calmed down and wrote his action plan. Please describe how Dr. Akram defined the problem and what major activities Dr. Akram must have included in his action plan for improving data quality...

PSa. Definition of the problem

PSb. Major activities

- 1.
- 2.
- 3.
- 4.
- 5.
- 6.
- 7.
- 8.
- 9.
- 10.

SELF-EFFICACY

This part of the questionnaire is about your perceived confidence in performing tasks related to health information systems. High Confidence indicates that person could perform the task, while low confidence means room for improvement or training. We are interested in knowing how confident you feel in performing HMIS-related tasks. Please be frank and rate your confidence honestly.

Please rate your confidence in percentages that you can accomplish the HMIS activities.

Rate your confidence for each situation with a percentage from the following scale

0	10	20	30	40	50	60		70		80)	9	0	1	00	
SE1.	I can che	eck data	accuracy	ÿ		0	10	20	30	40	50	60	70	80	90	100
SE2. I can calculate percentages/rates correctly					0	10	20	30	40	50	60	70	80	90	100	
SE3. I can plot data by months or years					0	10	20	30	40	50	60	70	80	90	100	
SE4. I can compute trend from bar charts					0	10	20	30	40	50	60	70	80	90	100	
SE5.	I can ex	plain fii	ndings &	their												
i	mplication	ons				0	10	20	30	40	50	60	70	80	90	100
SE6. I can use data for identifying gaps																
	and sett	ing targe	ets			0	10	20	30	40	50	60	70	80	90	100
SE7. I can use data for making various types of																
	decision	ns and pr	oviding	feedbac	ek .	0	10	20	30	40	50	60	70	80	90	100

We would like you to solve these problems about calculating percentages, rates and plotting and interpreting information.

C1. The estimated number of pregnant mothers is 340. Antenatal clinics have registered 170 pregnant mothers. Calculate the percentage of pregnant mothers in the district attending antenatal clinics.

C2. The full immunization coverage for 12-23 month-old children were found 60%, 50%, 30%, 40%, 40% for years 1997, 1998, 1999, 2000 and 2001 respectively.

C2a. Develop a bar chart for coverage percentages by years

C2b. Explain	the	findings	of	bar	chart
--------------	-----	----------	----	-----	-------

C2c. Did you find a trend in the data? If yes or no, explain reason for your answer

2d. Provide at least one use of above chart findings at:

UD1. Facility level

UD2. District level

UD3. Policy Level

UD4. Community level

C3. A survey in a district found 500 children under five years old that were malnourished. The total population of children less than five years old was 5000. What is the malnutrition rate?

C4. If the malnutrition rate in children less than 2 years old was 20% and the number of total children less than 2 years old was 10,000, then calculate number of children who are malnourished.